

**S. 2902, BROADBAND INTERNET REGULATORY
RELIEF ACT OF 2000**

HEARING

BEFORE THE

**COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE**

ONE HUNDRED SIXTH CONGRESS

SECOND SESSION

JULY 26, 2000

Printed for the use of the Committee on Commerce, Science, and Transportation



U.S. GOVERNMENT PRINTING OFFICE

84-596 PDF

WASHINGTON : 2003

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
Fax: (202) 512-2250 Mail: Stop SSOP, Washington, DC 20402-0001

SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED SIXTH CONGRESS

SECOND SESSION

JOHN McCAIN, Arizona, *Chairman*

TED STEVENS, Alaska	ERNEST F. HOLLINGS, South Carolina
CONRAD BURNS, Montana	DANIEL K. INOUE, Hawaii
SLADE GORTON, Washington	JOHN D. ROCKEFELLER IV, West Virginia
TRENT LOTT, Mississippi	JOHN F. KERRY, Massachusetts
KAY BAILEY HUTCHISON, Texas	JOHN B. BREAU, Louisiana
OLYMPIA J. SNOWE, Maine	RICHARD H. BRYAN, Nevada
JOHN ASHCROFT, Missouri	BYRON L. DORGAN, North Dakota
BILL FRIST, Tennessee	RON WYDEN, Oregon
SPENCER ABRAHAM, Michigan	MAX CLELAND, Georgia
SAM BROWNBAC, Kansas	

MARK BUSE, *Republican Staff Director*
ANN CHOINIERE, *Republican General Counsel*
KEVIN D. KAYES, *Democratic Staff Director*
MOSES BOYD, *Democratic Chief Counsel*

CONTENTS

Hearing held on July 26, 2000	Page 1
Statement of Senator Breaux	43
Statement of Senator Brownback	1
Statement of Senator Dorgan	42
Statement of Senator Gorton	40
Statement of Senator Rockefeller	39

WITNESSES

Ashdown, Sue, Co-owner, XMission, and Executive Director, American Inter- net Service Providers Association	50
Prepared statement	53
Bryan, John Shelby, Chairman and Chief Executive Officer, ICG Communica- tions, Inc.	7
Prepared statement	9
Duesterberg, Thomas J., Ph.D., President and Chief Executive Officer, Manu- facturers Alliance/MAPI Inc.	54
Prepared statement	57
Ellis, James D., Senior Executive Vice President and General Counsel, SBC Telecommunications, Inc.	16
Prepared statement	18
Glassman, James K., Resident Fellow, American Enterprise Institute, and Host, Techcentralstation.com	60
Prepared statement	68
Haynes, Arne L., President and Chief Executive Officer, The Rainier Group ...	21
Prepared statement	23
Kennard, William E., Chairman, Federal Communications Commission, pre- pared statement	2
Pitsch, Peter, Communications Policy Director, Intel Corporation, on behalf of the Information Technology Industry Council (ITI)	70
Prepared statement	72
Struminger, Eric, Managing Director, Paine Webber Incorporated	74
Prepared statement	76
Taylor, Robert, President and Chief Executive Officer, Focal Communications, and Chairman, Association for Local Telecommunications Services	24
Prepared statement	27

S. 2902, BROADBAND INTERNET REGULATORY RELIEF ACT OF 2000

WEDNESDAY, JULY 26, 2000

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Committee met, pursuant to notice, at 9:37 a.m. in room SR-253, Russell Senate Office Building, Hon. Sam Brownback, presiding.

OPENING STATEMENT OF HON. SAM BROWNBACK, U.S. SENATOR FROM KANSAS

Senator BROWNBACK. The Committee will come to order.

The Committee today will hear testimony on S. 2902, the Broadband Internet Regulatory Relief Act of 2000. The legislation would eliminate unnecessary regulations that currently inhibit the deployment of broadband services in rural and other areas. I welcome all of you to the hearing. I look forward to the testimony.

Broadband services have the potential to dramatically change the way we communicate, learn, obtain medical treatment, shop, and entertain ourselves. As much change as the Internet itself has wrought in our society, having high-speed access to the Web increases the types of applications that can be provided over the Internet.

But before they can be realized, we need to ensure that all Americans, whether they live in urban or rural areas, whether they live in flat or mountainous areas, or whether they live on the coast or on the Great Plains, have access to broadband services. That is what the hearing is about.

The problem is that, while broadband services are being deployed at an increasingly rapid pace, they are not being deployed in rural and other high-cost, low-profit areas. A recent study conducted by NTIA and the RUS found that: "Deployment in urban and rural areas is not proceeding at a comparable pace. The major cable and DSL providers are both concentrating on serving metropolitan urban areas with high population densities. Residents in rural areas will generally be the last to receive the service."

In addition, a recent Sanford Bernstein-McKenzie study found that: "Many of the cable upgrades to date appear to be targeted at the most attractive neighborhoods, i.e., high density and high household incomes."

According to one survey, more than 73 percent of cities with populations of 500,000 to 1 million have cable modem and/or DSL service, but less than 5 percent—less than 5 percent—of towns of 5,000

to 10,000 have cable modem service, and less than 2 percent of such towns have DSL service. All the cities surveyed that had populations greater than one million had both cable modem and DSL service, while less than 2/10 of 1 percent of towns of less than 1,000 people had either cable modem or DSL service.

The NTIA–RUS study found a plausible explanation for this disparity: “The costs of high speed cable data deployment and operation in rural areas are high and, because the subscriber base in rural areas is more dispersed than in more densely populated areas, there is less economic incentive to connect rural areas.”

Some members of the competitive community argue that competition will drive broadband deployment into rural areas. That is simply not the case. As the NTIA–RUS study found: “There is little evidence to date that competition among wire-based and terrestrial wireless-based systems has promoted near-term deployment of advanced services in rural areas outside of towns.”

In addition, the Sanford study previously mentioned found that: “Wireless will not be a factor in the residential broadband market until at least 2002.” The Bernstein–McKenzie report further stated that fixed wireless “will primarily address residential customers and markets in areas where advantageous climates and topographies permit filling in holes that cable and DSL find less economical to serve.”

Competition will therefore not drive broadband deployment in rural areas. The economics of broadband deployment in rural areas simply do not facilitate the type of competition that we currently are witnessing in urban and densely populated suburban areas. As a result, Congress needs to provide an incentive to companies to deploy broadband services in rural areas.

Different people have looked at this and said there are different ways we could go. Some Senators have proposed subsidies to facilitate deployment. Others have proposed tax incentives. But before we explore either of these avenues, Congress needs to take a look at how we regulate companies when they provide broadband services. By eliminating unnecessary regulations, we can provide the proper incentives for companies to make broadband as ubiquitous as the telephone.

As even FCC Chairman Bill Kennard has acknowledged, broadband is a nascent market, in which no company or particular technology is dominant.

[The prepared statement of Chairman Kennard follows:]

PREPARED STATEMENT OF WILLIAM E. KENNARD, CHAIRMAN, FEDERAL
COMMUNICATIONS COMMISSION

Thank you Mr. Chairman and Members of the Committee. I appreciate the opportunity to submit written testimony to the Committee this morning.

I would like to state at the outset that I agree wholeheartedly with the objective of speeding deployment of broadband services to all Americans, regardless of where they live. Nobody should be left behind in the broadband revolution.

Despite the old saying, however, sometimes you *do* have to look a gift horse in the mouth, particularly if it is a Trojan Horse. I am afraid that is what this legislation is. It appears to be a gift horse to competition, but it is really just the opposite. It would slow down the delivery of broadband services to rural areas by impeding the growth of competition.

The genius of the Telecommunications Act of 1996 (1996 Act) is the delicate balance it strikes between regulation and deregulation to achieve competition in all

forms of communications, and to deploy the fruits of that competition to all of the American people. The process has worked well, and consumers are better off as a result.

I am sure that increased competition is the well-meant intention of the proposed legislation. Inadvertently, however, I believe this legislation will not only upset the balance struck by the 1996 Act, it actually would reverse the progress attained by the 1996 Act. In an effort to move us forward, this bill mistakenly moves us backward.

The 1996 Act Is A Model For the World

Recently, the European Commission (EC) issued a bold package of proposed legislation and directives aimed at bringing the Internet revolution to Europe. It is no coincidence that the EC's initiative looks like a close cousin of our Telecommunications Act of 1996. The European Commissioners have concluded that in order to chart a course towards American-style Internet growth they must build a vessel not unlike the 1996 Act. This course includes such staple items included in our Act as local loop unbundling and collocation.

We are setting the example for the rest of the world. Changing course midstream by diminishing the incumbent carriers' obligations to open the local markets to competition would not only be detrimental to American consumers, but would also put at risk the leadership role the United States has played in the global telecommunications market.

A Fabric

The 1996 Act is a fabric, with the thread of each part connected to every other part. Unravel one thread, and you risk unraveling the entire fabric.

As I tell regulators from other nations, you cannot cherry-pick the 1996 Act. In this age of convergence, no network is an island, and the conduit and content of each is entwined with every other.

My message to you today is simple: the Telecommunications Act of 1996 is working. Because of years of litigation, competition did not take hold as quickly as some had hoped. The fact, however, that it is now working is undeniable. Local markets are being opened, broadband services are being deployed, and competition, including broadband competition, is taking root.

Now that implementation is fully underway it would be tragic to change directions. That is my concern with the bill before you. It proposes to exempt an incumbent local exchange carrier (ILEC) from the Section 251(c) unbundling and resale requirements, with respect to advanced services, if 80 percent of the local loops in a given service area are "DSL-capable" within 3 years or 100 percent are "DSL-capable" within 5 years. But, without unbundling and resale, competitors seeking to provide broadband services would be frozen out and rural consumers would soon be forced to pay higher rates. This is not a step I can endorse.

I would also note that the issues surrounding inter-carrier compensation for ISP-bound traffic are before the Commission in a formal rulemaking proceeding. We have compiled a record, the analysis is currently under way, and we expect to resolve the issues expeditiously. Therefore, I respectfully request that the issue of reciprocal compensation continue to reside, in the first instance, with the Commission. I will keep you apprised of our progress in this proceeding.

Rapid Growth of Broadband Deployment

As local markets are opened, broadband deployment is both stimulated and accelerated. Specifically, it is the opening of those local markets that is driving broadband deployment and innovation. This is true because nondiscriminatory access to the "last mile" and the ability to collocate—both components of the competitive checklist—are critical inputs for the provision of DSL service.

The Commission's faithful implementation of the Act has resulted in an explosion of broadband deployment. As of the beginning of the year 2000, we estimate there were 2.8 million actual subscribers to broadband, high-speed telecommunications services at speeds of at least 200 kbps in one direction. About 2 million of those lines were serving residential subscribers.

The DSL business is growing so fast that the BOCs are struggling to keep up with demand. *The Wall Street Journal* reported that SBC is installing about 3,500 DSL lines each day. At the end of the first quarter of 2000 there were approximately 800,000 DSL lines in service in the United States. About 75 percent of those lines are provided by incumbent LECs and 25 percent by competitive carriers.

These trends show no sign of slowing down. Analysts project that deployment of DSL will increase by 300 to 500 percent over the next year. Analysts also estimate that subscribership to cable broadband services will at least double by the end of this year, and by the end of 2005 could reach as many as 20 million subscribers.

LECs and cable operators are predicted to invest over 25 billion dollars in infrastructure improvements over the next four years to bring broadband services to their customers.

The market-opening 1996 Act sparked infrastructure investment in telecommunications facilities by incumbent LECs as well as competing carriers. For example:

- Incumbent LEC investment in infrastructure was flat or declining until the passage of the 1996 Act;
- After the 1996 Act, incumbent LEC investment jumped approximately 20 percent;
- Aggregate industry investment subsequent to passage of the Act, including both incumbent LECs and competing carriers, nearly doubled, increasing from 30 billion dollars to 60 billion dollars.

These statistics do not paint a picture of incumbent companies deterred by legal requirements from deploying new services to consumers.

The vision of the Act and the vision shared by the FCC—that consumers will have a choice of providers offering a choice of pipes into the home or workplace—is being realized. It is being realized through the opening of markets required by Congress in the 1996 Act. The rapid growth of broadband services is tangible proof that the market-opening requirements of the Act are working.

Competition Drives Broadband Delivery to All Areas

The opening of local markets drives competition, innovation, and produces a breadth of offerings. Although DSL technology has been available for years, it was not until the passage of the Act that competitive providers—called data LECs or DLECs—specializing in DSL deployment were born and began offering DSL service to consumers. Competitors need to collocate their equipment in BOC central offices and require conditioned local loops before they can even offer facilities-based DSL services. Then, to be competitive, DLECs require timely and cost-based loops and collocation. Once the DLECs had access to the inputs necessary to offer their DSL products to consumers, the threat of such competition spurred the BOCs to develop their own DSL products. Competition from the incumbent monopolies, in turn, is spurring the DLECs to develop even more new and innovative broadband products, services, packages, and prices. It is precisely this sort of competitive cycle that will accelerate the availability of broadband technology for all Americans.

Of course, competition among technologies as well as providers is also driving this investment. Wireless technologies—both terrestrial and satellite—are also on the scene. High-speed Internet service via satellite is available today virtually everywhere in the United States, including rural areas. Analysts project that wireless technologies will have 6 to 12 percent of the broadband market by 2004. Analysts also project that DSL will overtake cable as the overall leading technology for delivery of broadband services as early as 2002, with cable retaining its dominance amongst residential and small business customers until 2004, when cable and DSL will have equal market shares.

For the first time in history consumers are able to choose their local service provider and take advantage of increased competition for their long distance calls as a strong new competitor enters the market. The rewards do not end there. Competitive markets are also bringing consumers new choices in technology for the 21st Century.

Changing the rules of the game at this juncture would also undercut the substantial infrastructure investment being made by competitive telecommunications providers. For example, competing carriers have invested 30 billion dollars in new networks since the passage of the Act and are now investing over 1 billion dollars every month in their networks. In 1999, competing carriers are estimated to have spent over 15 billion dollars on overall capital expenditures, up from about 9 billion the year before. Investors will cut off the spigot when competitors are forced to try to compete with monopoly incumbent providers without full and fair access to the BOC's bottleneck facilities.

The simple reason why rural customers, and other customers in un-served and under-served areas, are not yet being served as robustly as we would like is not caused by legal impediments. Rather it is largely about simple economics. Providing customers with sophisticated services in areas of low density is an expensive undertaking. As such, the Commission has consistently acted to remove barriers to infrastructure investment and promote competition in broadband. For example, the Commission has:

- Convened a Federal-State Joint Conference to provide a forum for dialogue between the Commission, the states, and local and regional entities regarding the deployment of advanced telecommunications capability;
- Strengthened our collocation rules to encourage facilities-based advanced services by competitors;
- Encouraged the resale and unbundling of advanced services, but clarified that xDSL services are not subject to the resale discount when sold in bulk to ISPs;
- Encouraged the competitive delivery of xDSL services through line sharing;
- Ensured non-discriminatory access to facilities through separate affiliate conditions in the SBC/Ameritech and Bell Atlantic/GTE mergers;
- Established a comprehensive reporting requirement for providers of broadband services in order to seek greater insight into the development of broadband markets within particular geographic areas;
- Completed a successful auction of LMDS licenses that can be used for the provision of advanced services, and established a filing window for applicants to apply for authority to provide two-way MDS services.

In addition, to the extent that there may be instances where a LATA boundary is standing in the way of consumers getting broadband services from BOCs, the Commission has set up a LATA boundary modification process. For example:

- A BOC that provides advanced services to customers within a state may demonstrate that it cannot obtain an interLATA provider to connect its in-state network to the Internet and request a LATA modification to allow it to connect its network to the nearest out-of-state Network Access Point;
- A BOC could also request a LATA boundary modification to allow it to serve a particular customer, such as a hospital or university, where the customer cannot obtain an interLATA connection for its network; or
- A BOC may also demonstrate that it would not be able to deploy xDSL service to a LATA within a multi-LATA state unless the BOC is allowed to aggregate traffic from one LATA to another, or may be the advanced services provider of last resort for residential customers within a particular state. The BOC may then argue that it is uneconomical to deploy advanced services to such customers without a LATA boundary modification.

Notably, we have not received any requests for LATA modification since adopting this procedure in February 2000, and have received no requests to refile prior petitions. The Commission has stated its commitment to reviewing, in an expeditious manner, all LATA boundary modification requests that would provide consumers with advanced services.

Conclusion

In conclusion, the 1996 Act is working. Passage of the proposed legislation at this critical juncture would disrupt the Act's delicate balance between regulation and deregulation, postpone the benefits of competition to consumers by creating uncertainty and litigation, curtail the flow of investment into new markets, and inhibit the Act's goal of fostering broadband deployment. For all of these reasons, I urge you let the Act continue to work.

Senator BROWNBACK. If no company or technology is dominant, then no carrier should be regulated like a dominant carrier when it offers broadband services. The rules imposed on incumbents by section 251(c) of the Act should continue to apply to telephony and the old parts of the telephone network, but when it comes to new broadband services and new pieces of the network the incumbent local exchange carriers, the ILECs, should be subject to no more regulation than any other company.

The current disparity in regulatory treatment is most striking with respect to cable companies, which have a comparable customer base as ILECs, yet are almost completely unregulated with respect to high speed cable modem service. According to the Bernstein-McKenzie study again: "Under the status quo, cable has thus

enjoyed a benefit, namely freedom from regulation, relative to the telcos on high speed services.”

Regulatory parity would provide the ILECs with the same economic incentive to invest in new services, technology, and equipment as any other broadband provider. ILECs could aggressively deploy new equipment and offer new services without enabling their competitors to borrow the ILECs’ facilities. ILECs would recover their costs as quickly as the market permitted.

The Broadband Internet Regulatory Relief Act would address these issues. Primarily what it would do is require the large ILECs to provide advanced services to 80 percent of their serviceable customers within 3 years and to 100 percent of such customers within 5 years. ILECs would no longer be subject to stricter regulatory requirements that do not currently apply to cable companies or CLECs for the provision of advanced services. There is a number of other provisions in the bill which we will talk about here from panel members today.

Very few companies would ever enter a new market by serving less profitable areas first. But with the right incentives, the ILECs could be poised to enter the broadband market in rural areas now and prevent thousands of rural communities from being denied high speed access to Internet. The Broadband Internet Regulatory Relief Act provides such incentives and I hope that my colleagues will give it their consideration.

I would note before we go to the panel that Senate Bill 2902 does not in any way, shape, or form prevent the payment of any compensation to competitive carriers for their cost of transporting traffic to the Internet. While the legislation precludes the application of reciprocal compensation to Internet-bound telecommunications traffic, S. 2902 does not prevent the FCC from crafting a new formula for compensating CLECs for handling such traffic on their networks, and I would hope that our witnesses, to the extent that they have stated otherwise, would correct their testimony in their oral remarks.

With that, we have a number of panelists here to testify on two panels on this very important topic of how we get broadband high speed Internet access out to rural areas and broadly dispersed across this country. On panel one we have: Mr. John Shelby Bryan, Chairman and CEO of ICG Communications; we have Mr. James Ellis, Senior Executive Vice President and General Counsel of SBC Telecommunications; Mr. Arne Haynes, Skip Haynes, broadband, The Rainier Group; and Mr. Robert Taylor, President and CEO of Focal Communications.

All cell phones will be turned off during the hearing if you could, or put them on stun if you would, instead of on the other route, if possible.

We will run the clock on—let us put it on a 5 minute interval to give you some idea of where you are. We will take your full written testimony into the record if you would like to submit it as such. But I would appreciate your directing your attention as to how can we address this topic of getting the broadband high speed Internet access out to the broader dispersed areas, the rural areas across our country that are being left out in this current expansion.

So with that, Mr. Bryan, if you would be willing to testify.

**STATEMENT OF JOHN SHELBY BRYAN, CHAIRMAN AND CHIEF
EXECUTIVE OFFICER, ICG COMMUNICATIONS, INC.**

Mr. BRYAN. Good morning. Thank you for the opportunity to appear before you today and discuss the implications of the proposed broadband and reciprocal compensation legislation for national telecom policy. I am Jay Shelby Bryan, Chairman and Chief Executive Officer of ICG Communications, Inc., and I am here also on behalf of COMTEL and ICG is a member of ALTS.

ICG is the largest independent facilities-based CLEC, meaning that it is not affiliated with any cable company, long distance provider, or, importantly for today's hearing, any Internet service provider, ISP.

I begin with one point on which I believe everyone in this room can agree: competition in the local telecommunications market yields numerous customer benefits, including technological innovation, lower prices, and improved quality. Congress brought these very benefits to customers by passing the 1996 Telecommunications Act. My experience has been that the act embodies a great vision that has just begun to be realized.

In many ways, ICG's story is just what Congress intended by the act. We are deploying brand new technologies to provide innovative services. We are building out an extensive nationwide telecommunications network using fiber optics and packet switching facilities, and we are deploying broadband services at a high rate. In addition to all types and sizes of business customers, we also play an important role serving the ISP market. In fact, we are handling 10 percent of nationwide ISP traffic and carry 30 percent of ISP traffic in California alone.

ICG cannot effectuate the pro-competitive goals of the act by itself. We are joined by over 375 CLECs in the United States, including 333 facilities-based CLECs, employing over 70,000 people. The capital that we raise has been spent deploying over 820 voice switches and 1400 data switches, 10.4 million access lines, and over 4 million miles of fiber.

These figures represent no small feat by new competitors who have benefited from almost every provision of the act. I think it is fair to say that there would be no DSL if it were not for CLECs. Virtually the entire Internet backbone network is being provided by competitors. Data CLECs supply over 100,000 of the 500,000 total DSL lines in service, a market share of 20 percent.

More importantly, CLECs instigated the ILECs to deploy DSL themselves, to the benefit of all consumers. SBC says it will make DSL service available to 77 million customers by the year 2002. Would this have happened without the act, without competition? I think not.

In that context, what about the proposed bill? Unfortunately, it would put telecommunications competition in reverse and would severely handicap competitors at the very moment they are beginning to see profitability on the horizon. The central premise of the bill is that the incumbents should not have to unbundle or permit competitors to interconnect with their advanced telecommunications network. It is improbable that ILECs would build a new advanced network that does not depend significantly on the existing network which was built with captured ratepayer dollars.

Moreover, to fence off new network from competitors is bad policy. Do we tell the clever innovator in San Jose with an idea that he cannot connect to Bell's new packet switches to complete calls to his customers, even though it may create a tenfold savings to the ultimate customer? Are we going to wall off networks that are used to provide advanced services, leaving only the old network accessible to innovators and competitors? Such a result makes no sense.

The reciprocal compensation provisions of the proposed legislation would cause serious harm to local competition and, perhaps worse, significant harm to the Internet. How did the dial-up access market develop? Senator Brownback, you were referring to the fact that there is limited service in the rural areas. Well, 3 or 4 years ago the ISPs wanting customers to reach them were not also being adequately served by the ILECs. Their failure created an opportunity for my company. We did a good job in serving the market and won customers. We saved the ILECs from deploying billions of dollars in capital and helped prevent customers from moving off the telephone network to other providers like cable telephone companies.

In spite of the technical and legal complexities, the crux of this issue is simple. While the ILECs want to collect lots of money for the services they provide to CLECs, the ILECs find it inconceivable that they must pay CLECs for the same services. In the simplest terms, CLECs must get paid somehow for the costs they incur.

But let us remember what competitors have had to go through to get this business. Before we can provide service to ISPs, we have to spend at least \$10 million for a single circuit switch so people can connect to the Internet. Then we have to deploy fiber or trunking to the Bellco central office and in turn we have to deploy connection to the ISPs. Then we must market the ISPs and sell them our service.

Only after we have made this significant capital investment and these expenses do we earn the right to terminate ILEC customer traffic on our network. While ILECs and CLECs may disagree and litigate about what those costs are, no one actually denies there are costs.

So how should CLECs get paid for these costs? CLECs cannot charge ISPs access charges, as they would a long distance carrier. The FCC has appropriately prohibited the use of that compensation mechanism. What are the other options? The ILECs suggest that the CLECs should bear the burden of these costs themselves. This is not possible. CLECs are constantly seeking capital from the debt and equity markets to build network infrastructures. If CLECs face uncompensated costs, they will be forced to think carefully about serving ISPs, to the detriment of all users of the Internet.

Could CLECs just get the money from ISPs' customers, as the ILECs suggest? We have a grave concern that raising the cost of using the Internet by passing additional costs on to the ISPs will have a dampening effect and the exciting growth in the Internet services. Second, we would worry about the negative impact on the many small but innovative ISPs who may not be able to compete against the ILEC-owned ISPs.

Alternatively, if we are not compensated for our network, we would have to evaluate whether it made sense to serve that mar-

ket. ISPs could be left to search for network capacity, capacity they may not find in the marketplace. Without competition in the fastest-growing segment of the telecommunications market, Internet access, and insufficient capacity on the incumbents' network, where could they go? Nowhere, and the development of the Internet would stop dead in its tracks.

The way I see it, when ILECs pay CLECs for costs of services the CLECs provide, which costs the ILECs actually avoid, what harm could possibly result? Simply because ILECs pay money, even a significant amount of money, to the CLECs does not in and of itself mean something is wrong with the Act.

If this is such a problem for the ILECs, they can avoid it by deploying their own network. Instead of coming to Congress seeking legislation that protects them from competition, they can do what we did: build out a network, invest billions of dollars. And if the ILECs want to get rid of reciprocal compensation so badly, do it the way the Act intended, the old-fashioned way, by competing in the marketplace for Internet access.

If Congress truly is committed to promoting competition, innovation and consumer choice in telecommunications throughout the nation, you should not amend the Act as Senator Brownback proposes. Instead, Congress must allow the marketplace to continue to develop, with competitors and incumbents competing on fair and just terms.

Due to the competition that currently exists in the broadband marketplace, it is only a matter of time before all Americans have the ability to receive broadband access. No changes in the Act are needed to accomplish this goal. ICG urges you to continue to support competition in the telecommunications marketplace and its resulting benefit to consumers.

Thank you for the opportunity to testify here today. I would be glad to answer any questions.

[The prepared statement of Mr. Bryan follows:]

PREPARED STATEMENT OF JOHN SHELBY BRYAN, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, ICG COMMUNICATIONS, INC.

I. Introduction and Summary

Good morning. Thank you for the opportunity to appear before you today to talk about telecommunications policy and the reciprocal compensation and broadband legislation the Committee is considering. I am J. Shelby Bryan, Chairman and Chief Executive Officer for ICG Communications, Inc.

Based in Englewood, Colorado, ICG Communications is the country's largest, independent, facilities-based competitive local exchange carrier (CLEC). ICG is not affiliated with any cable company, long distance provider, or—importantly for today's hearing—any Internet service provider (ISP). ICG operates a nationwide communications network that provides integrated telecommunications services to over 700 cities. ICG primarily serves small to medium sized businesses, interexchange carriers (IXCs), and ISPs. ICG is an industry leader, furnishing services to more than 500 ISP customers, and providing Internet access for approximately 10 percent of the nation's dial-up Internet traffic. In fact, in 1999 approximately 30 percent of all Internet traffic in California traveled over ICG's network.

When I look at the Commerce Committee's roster, I see a number of Senators in whose state ICG operates. ICG has a significant presence in Texas and several states in the Southeast, including Georgia and Tennessee, and is expanding its service offerings to new markets, including Phoenix, Boston, Seattle, Las Vegas, and Portland, Oregon.

I look forward to speaking with all of you today in an effort to resolve the important reciprocal compensation and broadband deployment issues before us.

A. ICG Opposes Senator Brownback's Proposal Because It Would Hurt New Competitors in the Telecommunications Marketplace

The reciprocal compensation and broadband provisions in Senator Brownback's bill would block CLECs' ability to compete effectively in the telecommunications marketplace. First, the reciprocal compensation provisions would prohibit CLECs' from recovering the very real costs of terminating ISP calls on their networks, thereby threatening CLECs' competitive position and even their viability. As incumbent local exchange carriers (ILECs) have said repeatedly, termination costs are real and, in accordance with longstanding cost recovery principles, should be paid by the entity causing the costs—in this case the ILEC. CLECs, which are just beginning to see profitability, cannot bear these ILEC-imposed costs themselves. Instead, CLECs likely would have to pass along price increases to ISPs, who in turn are likely to increase their monthly Internet access fees to consumers by as much as six dollars (in addition to monthly fees of approximately \$10 to \$30 per month). CLECs may choose to exit the ISP market because it no longer would be cost effective to serve ISPs. A dwindling number of CLEC competitors would diminish the quality and choices all customers now enjoy. ILECs would be allowed to leverage their monopoly position into the ISP market.

Federal legislation to end reciprocal compensation is a drastic move, especially in a context in which most regulatory bodies already have grappled with the issue. The states, represented by the National Association of Regulatory Utilities Commissioners (NARUC), have told Congress that this issue should be resolved by the state public utilities commissions. Indeed, 38 state commissions have already resolved the issue—33 in favor of reciprocal compensation for ISP calls. The Federal Communications Commission (FCC) has told Congress that the issue is complex and should be considered in the context of the myriad other intercarrier compensation mechanisms currently in place. Federal and state courts have considered and are continuing to decide the issue; seven Federal District Courts and three Federal Appellate Courts have ruled in the CLECs' favor.

Perhaps most importantly, the marketplace already is working to resolve the issue. Most contracts (known as interconnection agreements under the Telecommunications Act of 1996 (Act)), had 3-year terms and are beginning to expire. During implementation of the Act, ILECs negotiated relatively high reciprocal compensation rates, assuming most of the payments would flow from CLECs to ILECs. But now, as the original contracts are being renegotiated, ILECs are bargaining for lower rates. Some new contracts have rates as low as 10 percent of the rates under the old contracts. Given that reciprocal compensation rates are falling, and that the states are using their authority under the Act to resolve conflicts when they arise, Congress need not change the law with regard to reciprocal compensation.

As to the broadband provisions of the bill, they are equally unnecessary as the Act and the market ultimately are working to bring technology and competition to consumers everywhere. The bill's broadband provisions eliminate some of the Act's local market opening requirements as they apply to packet-switched or advanced services. These requirements have allowed the CLEC industry to provide competitive alternatives, particularly in the broadband marketplace. This success has come despite a dizzying array of ILEC—and especially Regional Bell Operating Company (RBOC)—stall tactics, baseless lawsuits, and anti-competitive business practices that pre-date the Act but have worsened since the Act's inception. By eviscerating these requirements for packet-switched and advanced services, Senator Brownback's bill would limit CLECs' ability to offer broadband services via a packet-based system with many negative results. Competition for broadband services would be impeded, ILECs could re-dominate the market, and the very consumer benefits the Act sought to bring about through competition (*e.g.* lower prices, high quality services, and increased technological innovation) could be lost. Further, given that the CLEC industry is the driving force behind national broadband deployment, and that Senator Brownback's proposal would impede CLECs' ability to deploy broadband networks, the bill actually would have severely adverse unintended consequences.

II. The 1996 Telecommunications Act's Local Market Opening Provisions Have Allowed CLECs to Drive Broadband Deployment, Despite Continued Anti-Competitive ILEC Actions

The Act was designed to open the local telecommunications market to competition and create the consumer benefits that can only come through competition. The Act accomplishes this through a number of means, including interconnection, unbundling, and resale provisions. The Act allows CLECs to utilize, to a limited degree, and at cost-based rates, the network that ILECs constructed using captive ratepayer money acquired during the ILECs' monopolistic reign.

Following the Act's passage in 1996, CLECs were not immediately able to take advantage of the Act's market opening provisions. Despite the fact that the Act is a series of compromises to which the ILECs undeniably agreed, ILECs reverted to a variety of stall tactics, baseless lawsuits (fought at both the federal and state levels) and anti-competitive business practices to prevent full implementation of the Act's market opening provisions.

As a result of these ILEC actions, local competition has been seriously impeded. Nevertheless, the last few years have seen the rise of the CLEC industry and, with it, a dramatic increase in competition in the telecommunications market. As of the end of 1999, there were over 375 CLECs in the United States, including 333 facilities-based CLECs, employing over 70,000 people. These companies have deployed over 820 voice switches and 1,400 data switches, 10.4 million access lines, and over 4 million miles of fiber. In 1996, the combined CLEC market capitalization was \$3.1 billion. Today, that number is \$85 billion. Further, both institutional and private sources are investing record amounts in CLECs at all stages of the capital formation cycle. By undermining fundamental provisions in the Act, Senator Brownback's bill jeopardizes CLECs and the competitive benefits they have brought to the market.

A. The Reciprocal Compensation Provisions of Senator Brownback's Bill Would Harm Competition, Consumers and the Development of the Internet

1. Reciprocal Compensation Pays For Real Costs and Repealing ILECs' Obligations to Pay These Costs Will Result in Great Harm to Competition

At the outset, it bears emphasizing that reciprocal compensation pays for real costs—it is not a suspect revenue source, but rather a legitimate, regulator-sanctioned method for recovering these real costs when two local carriers handle a call. A reciprocal compensation system initially was adopted at the insistence of the Bell companies, when the traffic was imbalanced in their favor. Now that there is an imbalance in the favor of competitors, the Bell companies have attacked the system as somehow illegitimate.

The costs of terminating calls to ISPs are the same as the costs of terminating any local call; the transport from the hand-off point (or "point of interconnection") to the terminating switch, plus the switching and delivery of the call to the called number. From a cost point of view it is irrelevant whether the call is terminated to a residence, a business, or an ISP. All calls appear as local calls that are terminated to a local customer—and ISPs are simply local customers of a local exchange carrier. Since 1983, the FCC has enforced a policy that allows ISPs to purchase local service rather than access service and, as a result, when consumers access ISPs, they dial a local number and do not pay toll charges.

Congress, the FCC, the states, and the industry all have recognized that termination costs are real and should be compensated. Congress has found that reciprocal compensation is "integral to a competing provider seeking to offer local telephone services over its own facilities."¹ Congress provided under the Act that each local exchange carrier or "LEC" (whether the incumbent or a new competitor) is required to pay the other for these costs.² The FCC has found that "carriers incur costs in terminating traffic that are not *de minimis*, and consequently bill-and-keep [the absence of reciprocal compensation] arrangements that lack any provisions for compensation do not provide for recovery of costs."³ Thirty-three of 38 states that have considered the issue have held that dialing a local number to reach your ISP should be treated like a local call eligible for reciprocal compensation. No federal court which has reviewed this issue has decided against payment of reciprocal compensation. Even the incumbents have recognized that a terminating carrier incurs real costs that should be compensated.⁴

Forcing CLECs to incur uncompensated costs by eliminating reciprocal compensation for ISP traffic will weaken the CLECs' competitive position. CLECs have begun to prosper in the local market, due in large part to the pro-competitive provisions of the Act, and Congress should not act to threaten this progress. CLECs have been more successful than ILECs in attracting ISP customers because CLECs provide

¹H.R. Rep. No. 104-104, pt.1, at 72 (1995).

²47 U.S.C. 251(b)(5).

³See *First Report and Order, Implementation of the Telecommunications Act of 1996*, 11 FCC Red 15499, ¶ 1112 (1996), modified on recon., 11 FCC Red 13042 (1996).

⁴See, e.g., *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, Reply Comments of Bell Atlantic at 20 (May 30, 1996) ("The most blatant example of a plea for a government handout comes from those parties who urge the Commission to adopt a reciprocal compensation price of zero, which they euphemistically refer to as 'bill and keep.' A more appropriate name, however, would be '*bilk and keep*' since it will bilk the LECs' customers out of their money. . . . [A] regulatorily mandated price of zero—by any name—would violate the Act, the Constitution, and sound economic principles.").

state-of-the-art fiber-based infrastructure, better rates, and services (such as collocation) that are more tailored to ISPs' demands. ISPs are particularly telecommunications-intensive businesses, given that the Internet depends on telecommunications for its very existence. Therefore, ISPs have enormous needs for high volume, high capacity, and high quality services. The ILECs have failed to address adequately the high growth Internet access market and, in doing so, have lost out to the CLECs. Because of this success by competitors, the ILECs seek to strangle competition by making it economically impossible for CLECs to serve ISPs. This motivation is even more clear when one considers that every ILEC also is an ISP.

Let me give you one example of the power of competition in the local telephone market. In June, a part owner of a small family-run ISP from the rural town of Mt. Shasta, California spoke at a Congressional briefing about his experience receiving service from a CLEC. He recounted the following. First, he found that switching from the ILEC to a CLEC enabled his company, SnowCrest, Inc., to collocate its equipment at the CLECs premises, providing enhanced quality and greater efficiency. SnowCrest also purchased local points of presence (POPs) from the CLEC to enable SnowCrest's customers to reach the Internet without incurring toll charges by dialing a local telephone number. The ILEC did not provide these services. SnowCrest reported that it took the ILEC 30 days to fulfill an order for new lines and one to three weeks to repair any problems resulting from improper installation. Orders placed to a CLEC took only seven to 10 days to fulfill and repairs on improper installations were made in one day. This story is but one example of how competition has brought benefits to consumers and has spurred the development of the Internet.

If CLECs are forced to incur uncompensated costs, they inevitably will respond in one of several ways. First, CLECs could simply bear the costs. As a result, CLECs would become less viable local exchange competitors than ILECs, who will not bear such uncompensated costs. Second, CLECs may be forced to pass along price increases to ISPs, in which case those ISPs likely will increase their monthly Internet access prices to consumers. It is estimated that eliminating reciprocal compensation for ISP calls could cause Internet prices for consumers to rise by more than six dollars per month in addition to monthly fees that range from \$10 to \$30. Congress has made it a matter of national policy to close the "digital divide" and has manifested its intention that access charges not be levied on the Internet. Congress clearly recognizes the importance of maintaining reasonable Internet access prices. An increase of more than six dollars per month for an average consumer could have a wide impact. Right now, 129 million Americans have access to the Internet—over 125 million of whom use a local telephone connection to gain that access. At a time when ubiquitous access to the Internet is a national priority, Congress should not pass legislation that would make the Internet more expensive for American consumers.

A third CLEC response to the burden of uncompensated costs would be for CLECs to decline to serve the ISP market. Fewer CLECs serving ISPs naturally would result in fewer choices for ISPs. This outcome is especially disturbing since the ILECs also are ISPs, which motivates them to stifle the availability of quality services to their competitor ISPs. Ultimately, ISPs could be left to rely solely on the ILEC for service in a monopoly environment, the very situation the Act sought to correct by encouraging the development of local competition.

Finally, changing the reciprocal compensation mechanism now, once the CLECs have begun effectively to serve this market, will have serious effects on CLECs' continuing ability to raise capital. If Congress changes the competitive landscape, investors surely will become hesitant to fund CLECs. Because local services (wired or wireless) are extremely capital intensive, CLECs must regularly seek additional capital from both debt and equity markets, and they rely on a predictable regulatory framework to reassure investors. Forcing uncompensated costs on the competitive industry will endanger investment in the short term and in the long term will send a negative signal to capital markets about the stability and the future prospects of CLECs. Further, if CLECs become less viable in the market, raising capital to expand into broader telecommunications markets, including residential and business services, will become increasingly difficult. CLECs would be crippled in their efforts to build the very facilities that are needed to bring about Congress' pro-competitive vision when it passed the Act.

2. Congress Should Defer to the States, the FCC, and the Marketplace

Congress should allow the states and the FCC to resolve reciprocal compensation issues. The legislation unreasonably usurps state regulatory authority and prevents regulators from ensuring that CLECs are compensated for their costs. The state public utilities commissions (PUCs), guided by the Act, have significant experience

determining rates for a number of components of an interconnection agreement, of which reciprocal compensation is just one. States also have authority under the Act to resolve disputes arising from interconnection negotiations and to set rates for interconnection. The majority of the states have exercised the authority given to them by the Act to consider and resolve reciprocal compensation issues and have completed their proceedings. Given the history of the PUCs in resolving reciprocal compensation issues, there is no reason to isolate reciprocal compensation now and remove it from the states' authority.

The states, represented by NARUC, testified before the House of Representatives on June 22, 2000. NARUC told the House Telecommunications Subcommittee that

The reciprocal compensation issue is best addressed through the existing statutory and regulatory framework in the Act. Under the Act, incumbent and competitive carriers are required to negotiate reciprocal compensation payments. If these negotiations break down, state commissions are given the responsibility to arbitrate any disputes.⁵

CLEC claims about the detrimental effects of legislation to eliminate reciprocal compensation for ISP calls have been seconded by NARUC. NARUC testified that such legislation would raise ISPs' costs, in turn raising prices for access to the Internet for most consumers. Further, CLECs are required by law to transport and terminate all calls; thus, preventing CLECs from recovering the associated costs may constitute a "taking" of their property without compensation. According to NARUC, "it changes the Act so that a business is required to provide a service for free to its competitors."⁶ The states have determined that CLECs should be compensated for their costs and Congress should not usurp the states' authority to do so.

States play a key reciprocal compensation role. In fact, the states have a critical role in regulating other aspects of how, and if, CLECs can operate. One of the more spurious arguments against reciprocal compensation for ISP traffic is that there are "sham" CLECs that operate only to receive reciprocal compensation payments for their ISP affiliates. The states have—and always have had—the authority to determine which competitors will be authorized to compete in their state and under what terms and conditions. If ISPs were to attempt to become CLECs for purposes of collecting reciprocal compensation only—with no intention of providing local service—they would be hard pressed to pass muster with the states. The states have the authority to require competitors to provide local service to non-ISP customers or to impose other requirements on behalf of the public interest. If there were, in fact, "sham" CLECs, states are well equipped to discipline them.

The FCC currently is considering intercarrier compensation, and opened a rule-making on June 23, 2000, to solicit comment on a reciprocal compensation case recently remanded by the U.S. Court of Appeals for the D.C. Circuit. Larry Strickling, the FCC's Common Carrier Bureau Chief, testified before the House Telecommunications Subcommittee that resolution of the issue is complex and must necessarily be made in the broader context of all intercarrier compensation mechanisms.⁷ Mr. Strickling cautioned the Subcommittee against singling out ISP calls and setting up a separate regime. He further testified that state commissions and state courts are well-equipped to dispose of any cases of fraud by an ISP. The FCC's testimony reinforces the fact that the resolution of reciprocal compensation issues is a complex task that should not be dealt with through legislation that dramatically restructures intercarrier compensation for just one segment of the telecommunications market. Against this backdrop, the House Commerce Committee has given the FCC until September 30, 2000, to act, and Members of the Senate also have urged the FCC to act by that time. The FCC has stated its intention to meet that deadline.

Not only have regulatory bodies successfully tackled reciprocal compensation, but the market also is working to set reciprocal compensation rates at the appropriate level. The original interconnection agreements that govern the payment of reciprocal compensation are in the process of being renegotiated. As new contracts are negotiated, ILECs are asking for lower reciprocal compensation rates. Some new contracts have rates as low as 10 percent of the rates in the original interconnection agreements. As the competitive market continues to develop, rates naturally will

⁵ Hearing of the U.S. House of Representatives Committee on Commerce, Subcommittee on Telecommunications, Trade, and Consumer Protection, Regarding "H.R. 4445, to exempt from reciprocal compensation requirements telecommunications traffic to the Internet" ("House Reciprocal Compensation Hearing") Written Testimony of The Honorable Joan Smith, Commissioner, Oregon Public Utilities Commission and Chair, NARUC Telecommunications Committee at 4.

⁶ *Id.* at 3.

⁷ House Reciprocal Compensation Hearing, Testimony of Lawrence Strickling, Chief, Common Carrier Bureau, Federal Communications Commission, *Federal News Service Transcript*.

reach the appropriate level that reflects costs, as would happen in a free market. Given time, the market will resolve the issue on its own.

In the past, ILECs have recognized that a truly competitive market will operate to regulate the level of reciprocal compensation rates. During the implementation of the Act, when ILECs argued that they must be compensated for the use of their networks by competitors, those competitors worried that incumbents—believing that they would be the recipients of the bulk of the payments—would set reciprocal compensation rates unreasonably high. To assuage the FCC, Bell Atlantic argued:

If these rates are set too high, the result will be that new entrants, who are in a much better position to selectively market their services, will sign up customers whose calls are predominantly inbound, such as credit card authorization centers and Internet access providers. The LEC would find itself writing large monthly checks to the new entrant. By the same token, setting rates too low will merely encourage new entrants to sign up customers whose calls are predominantly outbound, such as telephone solicitors.⁸

Ultimately, the incumbents negotiated relatively high rates, thinking they would collect more than they paid, but instead they ended up paying more than they collect and asking Congress for relief. It bears noting that in cases in which the ILECs have stood to gain from reciprocal compensation, they have argued not only for high rates, but also have defended imbalances in traffic when that imbalance is financially in their favor. In the wireless context, for example, most wireless customers use their phones to dial wireline customers, but do not receive very many calls from the wireline network. ILECs terminate about four times as many calls from wireless networks as wireless providers terminate from the wireline network. Despite this dramatic imbalance in traffic, ILECs have argued that the ratio of traffic is immaterial, and that only the costs imposed on the terminating carrier should be considered.⁹ The ILECs' current statements that reciprocal compensation should not be paid when traffic is imbalanced should be viewed in the context of their arguments to the contrary when they are the beneficiaries. In reality, these payments are based on real costs and their rates should be negotiated by the parties in the market. Where, as here, market forces are at play, Congress need not intervene.

Congress has stated its intention to foster the growth of the Internet by creating an environment where no additional costs are imposed on Internet access. Congress also has manifested its commitment to creating a competitive telecommunications market through its passage of the Act by an overwhelming margin. Given the important objectives embodied in the Act, Congress should not pass legislation that threatens the growth of the Internet, the prices Americans pay for Internet access, and the viability of competition for local telecommunications services.

B. The 1996 Telecommunications Act's Market Opening Requirements Are Working to Stimulate Broadband Deployment

1. CLECs Are Driving Broadband Deployment

The competitive telecommunications industry currently is deploying broadband service at a staggering pace and CLECs are among the industry leaders in the provision and deployment of Digital Subscriber Line (DSL) service. Recent figures indicate that CLECs supply over 100,000 DSL lines, and the CLEC market share of DSL lines at the end of 1999 was approximately 20 percent. As a result, CLECs now are able to offer DSL broadband service to roughly 25 percent of the addressable market in the country, a number that will grow as the competitive industry continues to deploy broadband networks.

This push by competitive carriers to deploy broadband service has created a tremendous amount of competition within the broadband marketplace, and has resulted in the proliferation of advanced service offerings by both competitive and incumbent carriers, aggressive broadband service deployment schedules, and the significant benefit to consumers of high-speed Internet access at rates that are declining remarkably quickly. For example, SBC recently announced that it will slash rates and waive installation fees for its residential DSL service. Through its "Project Pronto" initiative, the company says it will provide DSL service to 77 million cus-

⁸ Reply Comments of Bell Atlantic, *supra* note 4, at 21.

⁹ See, e.g., Letter by Michael K. Kellogg to FCC Chairman William Kennard enclosing report by Professor Richard A. Epstein, *Matter of Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, CC Docket No. 95-185, 15-16 (May 16, 1996) (Bell Atlantic and SBC Communications recognized in 1996 that 85 percent of all wireless calls originate via wireless telephones and are terminated on the ILEC network. Bell Atlantic and SBC nonetheless argued that ILECs should be compensated for the costs of terminating wireless calls.).

tomers by 2002. Further, the RBOCs all have announced a significant acceleration of their broadband deployment schedules to counter CLEC deployment. Just as the Act intended, the incumbents are being forced to respond to competition initiated by CLECs.

Other industry segments also contribute to the rapid increase in broadband deployment. For example, cable companies, terrestrial and satellite wireless telecommunications providers, fixed and mobile wireless companies and other new entrants, including electric utilities, now offer broadband services. Currently, approximately 2 million U.S. customers access the Internet through cable modems with 7,000 new cable modem customers being added every day. The spread of broadband services has even reached rural communities and previously underserved areas. Many rural telecommunications companies, both private and cooperatives, are upgrading their systems to provide broadband services. Thus, rewriting the Act to increase the deployment of broadband services in rural areas is unnecessary.

2. The Bill's Broadband Provisions Would Limit CLECs' Ability to Compete in the Broadband Marketplace, and Ultimately Would Impede Broadband Deployment

Senator Brownback's bill would undermine the Act's local competition provisions. First, Senator Brownback's bill would remove an ILECs interconnection, unbundling, and collocation requirements for packet-based networks, and remove its resale requirements with regard to the provision of advanced services, provided that the ILEC meets certain build out requirements. Further, the bill would remove ILEC interconnection and unbundling requirements for optical fiber used to provide residential telecommunications service where the fiber is capable (or will be capable through an electronics upgrade) of providing high-speed data, VHS-quality video, and telephone exchange service, again dependent on build out requirements. The impact of these provisions on CLECs' ability to offer broadband services would be devastating. Denied access to ILECs' networks, CLECs would suffer. Competition in telecommunications cannot happen without the interconnection of competing providers' networks on fair terms and conditions and at reasonable rates. Without interconnection, no competitor could raise funds to deploy broadband services.

Second, if the FCC finds that an ILEC operates in an exchange in which a competitor also provides advanced services, the FCC must grant that ILEC unconditional pricing flexibility. The bill does not require actual competition to be present for ILECs to attain this pricing flexibility. Instead, as noted, the mere presence of a single competitive provider, regardless of the actual extent of competition in that exchange, will trigger pricing flexibility. As a result of this provision, in areas where an ILEC faces competition only from a single, small competitor, the ILEC would be able to lower its prices for advanced services to anti-competitive levels that the competitive provider could never match. In this way, the ILECs would assert their market power to restore their monopoly.

Third, ILECs that use remote terminals¹⁰ to supply advanced services must provide competitors access to subloop network elements used for advanced services (such as a Digital Subscriber Line Access Multiplexer (DSLAM)) but would not be required to provide collocation at the terminals. The inability to collocate would force CLECs desiring to offer broadband services through a remote terminal to use the ILECs DSLAM located in the remote terminal. CLECs that use an ILECs DSLAM are locked into the service and technology the ILEC offers through that DSLAM. Thus, the CLEC would be prevented from offering the very innovative, technologically advanced services that the Act sought to promote, and consumers would be stuck with whatever service the ILEC decided to offer. The inability of competitors to collocate at ILEC owned remote terminals would, as a practical matter, seriously hamper CLECs' ability to offer DSL and other services.

Fourth, pursuant to Senator Brownback's bill, ILECs would not be subject to the Act's network elements unbundling requirements unless the elements in question "are to be used *predominantly* to provide telephone exchange service," and telephone exchange service may not encompass broadband services. Although the language is not precise, this provision seems to limit CLECs' ability to buy network elements on an unbundled basis depending on what type of service is provided using those elements. As a result, data CLECs and traditional CLECs offering data services would not be able to purchase unbundled network elements necessary to offer broadband service, again severely limiting consumers' choices.

The bill does preserve CLECs' ability to gain access to ILECs' local copper loops. The value of this guarantee, however, is questionable. First, the bill implies that the Act was not meant to address packet-based and other advanced service net-

¹⁰ Remote terminals are the gray or green metal boxes incumbents install near consumers' homes to aggregate traffic from several customers.

works. In actuality, Congress did intend for the Act to encompass packet-based networks. FCC Chairman William Kennard recently supported this view when he said that "There was discussion of the Internet at that time [*i.e.* during consideration of the Act]." ¹¹ Packet network technologies have been available and deployed for at least a decade. Further, telecommunications services are quickly migrating to a predominantly packet-based architecture that offers increased quality of service and cost efficiencies. Under Senator Brownback's proposal, the CLEC industry would be relegated to using the older, less efficient copper based network when using ILEC unbundled network elements. Obviously, this result creates a distinct, unjustified, competitive advantage for the ILECs over their CLEC competitors.

IV. Conclusion

If Congress is truly committed to promoting competition, innovation, and consumer choice in telecommunications throughout the nation, it should not amend the Act as Senator Brownback proposes. Instead, Congress must allow the marketplace to continue to develop as it has, with incumbents and competitors interconnecting their networks, passing traffic back and forth, and competing on fair and just terms.

I wholeheartedly agree with the goal of providing broadband services to every American. There is, however, a right way to go about doing this, and a wrong way. Targeted, specific solutions, such as the FCC's *Advanced Services Order* ¹² allowing limited LATA modifications to support the deployment of advanced services to rural and underserved areas, is representative of the right way. Wholesale gutting of the Act, causing certain crippling of the competitive local telecommunications industry, is the wrong way.

Congress instead should permit the market to resolve this issue. Decision making bodies with expertise and experience, such as the FCC and the states, will guide this process. In the end, consumers will continue to access the Internet at affordable prices.

ICG urges you to continue your longstanding commitment to competition in the telecommunications marketplace, and its resulting benefits to consumers, and oppose the Brownback bill. Thank you for the opportunity to testify here today.

Senator BROWNBACK. I appreciate your testimony. I will look forward to asking you the question of how do I get my rural areas served. If you would, Mr. Ellis.

STATEMENT OF JAMES D. ELLIS, SENIOR EXECUTIVE VICE PRESIDENT AND GENERAL COUNSEL, SBC TELECOMMUNICATIONS, INC.

Mr. ELLIS. Good morning, Mr. Chairman. I am Jim Ellis, General Counsel of SBC Communications. Thank you for the opportunity this morning to share my company's views on this important legislation.

SBC in analyzing legislation that affects our business really follows two broad principles: First, competitive markets should be free from government regulation of the rates, terms, and conditions for the services that are offered in those competitive markets. Second, where for some public policy reasons regulation is imposed, it should be imposed on all service providers equally, symmetrically, for the services they all offer in those markets. I am pleased to say the legislation that is before us is going in the right direction with respect to both those principles.

I am not going to take a lot of time talking about the history of advanced services or even current market conditions. But there are a couple points that I think are of fundamental importance in eval-

¹¹House Judiciary Committee Hearing on Legislation Dealing with the Internet, Statement of William Kennard, Chairman, Federal Communications Commission, *Federal News Service Transcript*.

¹²*Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, Fourth Report and Order (adopted January 28, 2000, and released February 11, 2000).

uating this legislation. The first one has to do with what people refer to as a bottleneck: Is there a bottleneck for advanced services? Many people talk in terms of the justification for asymmetrical regulation, regulation of the telephone company, is based on the contention that there is a bottleneck.

Well, I submit there is no such bottleneck for advanced services. If we look at the residence market today, cable modem, as we all know, is a direct competitor for the xDSL services provided by the telephone company and others. The provision of cable modem services and xDSL services are provided independently. They do not use our networks and we do not use their networks—completely independent. In addition to cable modem and xDSL, we know that we have wireless alternatives, terrestrial and satellite are coming on. They do not depend on us. They are provided completely independent of the telephone company operation.

To the business market there are even more alternatives. AT&T and the long distance companies provide direct access to their customers without resort to telephone company facilities. The point is there is no bottleneck as it relates to telephone company control of facilities necessary for advanced services.

A second point: We do not even have a leadership, let alone a dominant, position with respect to advanced services. If there is any evidence of absence of a bottleneck, it is simply that we have in the marketplace four or five customers of the cable modem people for every one we have for DSL. There is no bottleneck. We do not have a dominant market position.

Despite that, what we have is asymmetric regulation, regulation that directly handicaps SBC and the telecommunications telephone companies' ability to deploy advanced services and serve the advanced services market at the same time that asymmetric regulation protects our competitors from full competition and deprives the public of the benefits of a fully competitive marketplace.

Let me give a specific example of what that means. The regulation of the cable modem people is virtually nonexistent. They do not have common carrier obligations, they do not have to interconnect their facilities, they do not have to permit resale. They do not have to—and this maybe in the future will be the most fundamental point—they do not have to provide open access. They can dictate the ISP they want to use, the terms and conditions. They can subsidize, they can bundle, and so on.

The telephone company does not have that capability. It is burdened and the public is denied the benefits of a fully competitive marketplace. It does not have to be this way. I would encourage the Committee to look at the experience in the wireless industry. In 1983 there were two providers. Today we have five or more in every market, five or more facility-based competitors. That happened with almost no regulation in that industry—competitive prices, alternative new services. That can be a model for advanced services as opposed to asymmetric regulation.

Now, with respect to reciprocal comp, we fully support the bill. Reciprocal comp was intended, designed to compensate the terminating carrier for its costs, if they were otherwise not recovered, for completing a local call. That is not what is happening. The reciprocal compensation today is not paid for completing a local call

when it goes to the Internet, the World Wide Web. Second, it has no relationship to the costs of completing them.

I will give a specific example in my own case why it is not a sustainable system. My daughter was in law school several years ago and she came to me at Christmas, and I said: What do you want for Christmas? She said: I would like a second line. I said: Well, that is not bad; that is about \$15 in Texas; that is reasonable. I said: Why do you want it? She said: Well, I want to leave my computer on, hooked up to the Internet, so I can get e-mail all the time. I said OK.

So I got her the second line. Southwestern Bell collected \$15 or so from me for that second line. I then find out that if her Internet service provider is behind a CLEC—ICG, Focal, or one of the others—and she does exactly what she said, at that time we would have paid that CLEC \$450 for a customer from whom we collected \$15. Now, that is not sustainable.

My company will spend something like \$750 million. Ninety-some percent will be in the area of reciprocal compensation. It is money that could be spent to deploy broadband faster to the very communities that Senator Brownback is talking about. We are a company that is committed to spend \$6 billion to bring broadband to 80 percent of our market. I wish it could be 100, I wish it could. I wish we could take that \$750 million and deploy it to that other 20 percent, many of which involve rural communities.

I would ask the Committee to consider these points and I would be happy to answer questions.

[The prepared statement of Mr. Ellis follows:]

PREPARED STATEMENT OF JAMES D. ELLIS, SENIOR EXECUTIVE VICE PRESIDENT AND GENERAL COUNSEL, SBC TELECOMMUNICATIONS, INC.

My name is Jim Ellis. I am the Senior Executive Vice President and General Counsel of SBC Communications Inc.

There are two fundamental principles that should guide Congress in its analysis of telecommunications legislation. First, competitive markets should be free from governmental regulation. Second, if there is some public policy reason for regulating a market, all service providers in that market should be subject to the same regulatory requirements.

In respect to the market for high-speed broadband Internet access and advanced services, there are certain undisputed facts. This is a new market offering new services, in which no service provider possessed a "head-start." It is a market in which new entrants will provide the *same* high-speed Internet access and offer the *same* advanced services to the *same* residential and business customers. It is also a market in which the cable industry is unregulated and is ahead of every new entrant in deploying the necessary technology to provide these services. This regulatory disparity has significant market impacts and imposes a competitive disadvantage upon the incumbent local exchange carriers (ILECs), such as additional costs, inefficiencies in the deployment of new technologies, and the inability to package content.

In addition, ILECs are inappropriately being required to pay reciprocal compensation on Internet traffic. The reciprocal compensation provision of the Telecommunications Act of 1996 ('96 Act) was designed to compensate local carriers for the costs of terminating local exchange calls originated by other local carriers' customers. Calls originating in a local exchange and terminating on the Internet are not local exchange calls. The current application of reciprocal compensation, whereby ILECs are forced to compensate competitive local exchange carriers (CLECs) for calls to Internet service providers are not related to the costs of terminating local calls. They are simply a subsidy of the CLEC industry.

I want to compliment Senator Brownback for his leadership in crafting this legislation. S. 2902 is a step in the right direction toward fulfilling SBC's fundamental principles in the market for high-speed broadband Internet access and advanced services.

Background

Historically, the only telecommunications pathway or wire to nearly every home and business in this country was the local copper loop. The local copper loop is part of the circuit-switched network owned and operated by local exchange telephone companies that, until recently, was capable of transmitting only narrow-band voice, and slow speed switched data services. The local exchange telephone companies are subject to pervasive regulation of the rates, terms and conditions under which they offer services at both the state and federal level. Historically, this regulation was based upon the fact that these companies operated pursuant to a legally franchised monopoly, and the local loop was considered a “bottleneck.”

Approximately 25 years ago, cable service began to emerge as an alternative to broadcast television service. It is provided through antennas located at the cable provider’s head-end that receive programming from satellites, which is then transmitted over coaxial cable to homes and businesses. Coaxial cable is different from the ILECs’ local copper loops, in that it is capable of transmitting broadband video and high-speed data services. Thus, the cable industry provides an alternative telecommunications pathway or second wire to the home.

In the past 15 years, additional telecommunications pathways to homes and businesses rapidly developed through various wireless technologies—digital satellite service, cellular and PCS service, and fixed wireless. We also began to see a convergence of these technologies, whereby the telephone, cable and wireless industries explored ways in which they each could provide customers a package that would include all of these services.

Most recently, the Internet—an interconnected network or web of computer data bases operating upon packet-switched technologies and IP protocols—evolved and made possible a new form of high-speed data communications and “advanced services.” When the ‘96 Act was being debated in Congress, the Internet and advanced services were still in their infancy. The precise nature in which these advanced services would be provided to the public was still uncertain. Congress sought to address this new telecommunications phenomenon and the promising new advanced services it had to offer through passage of Section 706 of the ‘96 Act. Section 706 established a new national telecommunications policy to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans.” Specifically, Congress directed the FCC and state commissions to pursue this objective by “utilizing price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulatory methods that remove barriers to infrastructure investment.” In the case of the ILECs’ provision of high-speed broadband Internet access and advanced services, such regulatory forbearance has not been forthcoming.

Advanced Services Market

The market for the delivery of advanced services is different from the market for narrow-band services.¹ Broadband services support speeds of 200 kbps and greater, and are typically 10 to 100 times faster than narrow-band dial-up or ISDN telephone lines. High-speed broadband services are also used much more than narrow-band services, because users of such services spend many hours “on-line” in a single session. They will tie-up telephone company facilities for longer than typical voice calls, and hence cost much more to provide.

The business market for high-speed broadband services is also separate and distinct from the consumer market for the same services, which consists of small business and residential customers.² Virtually all business customers have access to high-speed broadband service that is typically provided over T-1 lines that are not available to the residential customers, and business customers have many competitive alternatives for obtaining that high-speed broadband access.³

Cable Modem versus xDSL Service

The two industries with wires that pass the majority of homes and businesses in this country—cable and telephone—have been in a race to develop the technologies to provide their customers with high-speed broadband access to the Internet and to the new advanced services.

¹See K. Werbach, FCC Office of Plans and Policy, *Digital Tornado: The Internet and Telecommunications Policy* at 73–75, OPP Working Paper No. 29 (March 1997).

²In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, *Report*, CC Docket No. 98–146 at ¶ 28 (released February 2, 1999).

³Id. at ¶ 26.

The cable industry developed cable modem service to work with their broadband coaxial cable, and has been rapidly deploying its cable modem technology. The ILECs were at a competitive disadvantage in this race, because their narrow-band local copper loops were not equipped to provide broadband services. The ILECs had to develop a new technology—Digital Subscriber Line or xDSL service—that would enable their narrow-band local copper loops to carry high-speed broadband advanced services.

The ILECs are now scrambling to deploy Asymmetrical Digital Subscriber Line (ADSL) service as a competitive alternative to cable modem service. But, the cable industry is far ahead of the ILECs in the actual provisioning of advanced services to consumers. At the end of the first quarter of 2000, there were approximately 2.5 million residential broadband subscribers in the United States, of which 1.9 million or 77% were cable modem subscribers and only 21% were xDSL subscribers.

Asymmetric Regulation

Against this background, the rules and regulations that apply to the provision of advanced services by the cable industry and ILECs are entirely different.

The cable industry is essentially unregulated in the provision of cable modem service. Under Title VI of the Communications Act, the cable industry is not required to interconnect with its competitors, unbundle its facilities and make them available to competitors, or resell its services. Furthermore, the cable industry is not subject to the same open or equal access requirements as the telephone industry in that it is not currently required to give its customers a choice in the selection of an Internet service provider.

This unparalleled ability of the cable industry to control both the means of access to the Internet and the content that is delivered to the customer provides it with an unparalleled advantage in the marketplace, when compared to the ILECs which are trying to play catch-up with cable modem service. For example, AT&T/TCI/Media One and Time Warner alone control vast holdings in the access and content market. AT&T/TCI/Media One is the largest cable provider and provides cable modem service to almost 30% of all cable modem customers. Time Warner provides cable modem service directly to approximately 21% of all cable modem customers, and indirectly to an additional 17% of cable modem customers through its ownership of Road Runner. Time Warner and its content affiliates own 4 of the top 15 video programming services, and the largest premium TV network. Time Warner also operates Warner Brothers, one of the largest movie and television studios. AT&T and its content affiliates have ownership interests in 4 of the top 15 video programming services. Together, the Time Warner and AT&T consortia thus own 8 of the top 15 video programming services, including 4 of the top 5. In addition, it is no secret that AT&T has been trying to negotiate a joint venture with Time Warner, and that Time Warner and AOL, the largest Internet service provider, are planning to merge. This creates a situation where the cable industry could well develop a dominant position in the provision of certain forms of high speed Internet access and advanced services.

The ILECs, on the other hand, remain pervasively regulated today. Under Title II of the Communications Act, the ILECs are subject to common carrier regulation in their provision of advanced services. The ILECs are obliged to assist their competitors in offering competing xDSL services through the interconnection, unbundling, and collocation requirements of Section 251(a) and (c) of the '96 Act. In the case of SBC's advanced services affiliates, which are regulated as non-dominant telecommunications carriers, there is an interconnection obligation under Section 251(a) and a resale obligation under Section 251(b).

Reciprocal Compensation

Section 251(b)(5) of the '96 Act provides that each local exchange carrier has a duty to compensate other local exchange carriers for the costs of transporting and terminating calls originated by their customers. However, as a result of a patchwork of regulatory and court decisions interpreting Section 251(b), the ILECs have paid enormous sums of money for traffic terminating on the Internet.

Some CLECs have "gamed" the system by signing up Internet service providers, and claiming that calls to the Internet consist of two calls. The CLECs argue that the "first" call is from the ILEC customer and to the CLEC location within the local exchange, with a "second" call originating at the CLEC location and terminating on the Internet. The CLECs have largely been successful in convincing some regulators and courts that reciprocal compensation should be paid on the "first" call.

The problem with this scenario is that reciprocal compensation payments are calculated on a minute-of-use basis. This means that when a customer logs on to his/her computer to access the Internet, the CLEC is paid reciprocal compensation for

every minute the customer is "on line." Since the average Internet call results in the customer being "on line" for 30 minutes or 10 times as long as the average local call, the compensation being paid by the ILECs to the CLECs amounts to billions of dollars a year. In Texas alone, 92% of the minutes-of-use delivered by Southwestern Bell to the CLECs is bound for the Internet, with the number dropping to only 80% in SBC's region as a whole. Moreover, there is nothing reciprocal about this arrangement, because the Internet service provider served by the CLEC *never* calls Southwestern Bell's customer. The economics of this arrangement are simply not sustainable.

More importantly, it sends the wrong signals to the marketplace. The receipt of reciprocal compensation for Internet-bound traffic has become a new line of business for CLECs, thus creating an incentive for them to sign-up Internet service providers and to avoid residential customers. That is because, if a CLEC signs up large numbers of new residential customers two things will happen. First, the CLEC loses the reciprocal compensation revenues it had been receiving from calls those residential customers made to Internet service providers served by the CLEC. Second, if these new residential customers in turn call customers of the ILECs and/or Internet service providers served by other CLECs, the CLEC will have to pay reciprocal compensation to the ILECs and those other CLECs.

Thus, the current application of the reciprocal compensation obligation is nothing more than a transfer of wealth from the ILECs to the CLECs with no corresponding public benefit. Congress should clarify that reciprocal compensation is only available for the transport and termination of local telephone exchange service, and thereby create the proper incentive for CLECs to invest in facilities-based local competition.

In conclusion, SBC will support any legislative initiative that eliminates the current disparity in regulation that exists between the cable and telephone industries in the market for the provision of high-speed broadband Internet access and advanced services, or provides symmetrical regulation of that market. In addition, SBC supports elimination of the loophole that currently exists in the application of reciprocal compensation. We look forward to working with the Committee and the Congress to achieve these objectives.

Senator BROWNBACK. Thank you very much, Mr. Ellis.
Mr. Haynes, thank you for joining the Committee today.

**STATEMENT OF ARNE L. HAYNES, PRESIDENT AND CHIEF
EXECUTIVE OFFICER, THE RAINIER GROUP**

Mr. HAYNES. Thank you, Mr. Chairman, Senator Rockefeller. My name is Skip Haynes. I am the President of the Rainier Group. We are an incumbent local exchange carrier in the foothills of Mount Rainier some 16 miles from Seattle in Washington State. We have been in the business since 1910. My great-grandfather won it in a pinochle game in 1912 and I am a fourth generation manager, and my son just joined the company to run our interactive media operation.

Senator BROWNBACK. The family still plays pinochle?

Mr. HAYNES. We gave it up; it is too dangerous.

In my written testimony I have given you some idea of how small we are, but we have less than 4,000 incumbent phone company access lines that we serve. We have approximately a thousand cable TV customers that—we have started a cable TV company after the act was passed in 1996. We compete with AT&T, the former TCI. We also have 400 facilities-based CLEC customers. We are an Internet service provider and we provide long distance.

We are very much a startup operation. We have two other operations going. We will soon be competing with Pacific Bell in Central California and with Bell South in Florida. Again, we compete with AT&T, Qwest, the former U.S. West properties, a myriad of IXC's, and Internet service providers. We have 50 employees. Again, we are very small. We are triple our size since the Act

passed in 1996. So we are aggressive and excited about the new opportunities competition brings.

What we like about the bill, Senator Brownback, is its relief from regulation, and we support relief from regulation in every form, both Federal and State. We believe and we know from experience that regulation impedes competition and that regulatory costs are obscene, and anything we can do to reduce those, including the participation they would like to have in our competitive markets, is important.

Senator ROCKEFELLER. Do you feel that way about the FAA also?

Mr. HAYNES. No, sir, but they are doing a different service, Senator Rockefeller. That is a public safety thing in my opinion.

Senator ROCKEFELLER. Thank you.

Senator BROWNBACK. Please proceed with the testimony.

Mr. HAYNES. Thank you, Senator Brownback.

There is no digital divide in our Washington State operations. We provide cable modem services now. We are rolling out DSL services and we have conditioned our plant to serve 100 percent of our customers. That means the end of the Scott Turner Road as well as downtown Eatonville with its 1600 customers. That is the world headquarters, by the way.

I am either very bright for starting 10 years ago to develop a data network or I am really stupid for having invested shareholder money in something that we may be forced to give away to competitors. I believe the Brownback bill will allow us to continue to expand our operations. Without the deregulatory aspects of the Brownback bill, we think our operations in Washington could be severely curtailed.

Simply stated, a competitor using our facilities at ridiculously low costs can price their services below ours. Few, if any, of our costs go away at that juncture. Residual customers will have to pick up the difference. This is like Robin Hood stealing from the poor and giving it to the rich.

I started our data-focused expansion 10 years ago when I rejoined the company. I never dreamed that regulators would be so unfair and so unreasonable. If the current regulatory climate persists, I may not be able to continue to invest shareholder money in our incumbent LEC beyond the minimum required to provide plain old telephone service.

Meanwhile our competitor, little old AT&T, has little or no regulation or requirement to unbundle their digital facilities. Subsequent to the Ninth Circuit decision, why should my advanced services be subject to regulation and not theirs?

The Brownback bill has something I am a little more schizophrenic about. That is reciprocal compensation. Our first CLEC does not have a reciprocal comp component. I do not receive it or do not pay it. Our newest one will. We could make a lot of money with reciprocal compensation, but a business plan that is built on windfall profits makes no sense to me, and ultimately justice will prevail and I believe your provisions are correct, Senator Brownback. This is an unreasonable loophole and needs to be eliminated.

One part of the bill that I would recommend some enhancement, please, is preemption of State regulation in the same manner as

you are recommending for Federal. State regulators get many of their misguided notions from the FCC. It is also true, based on my experience, that the rules applied to the large companies trickle down to the small companies. Furthermore, the State regulators are drooling to fill the gap where any Federal regulation will go away. So, frankly, the States are more of a concern to us and we request that whatever language is required in this bill to make State and Federal regulation comparable would be very helpful.

I just want to say one more thing. Any one of our employees can better serve our customers than anyone in regulation. So let market forces work, and I believe the Brownback bill will help.

Thank you very much.

[The prepared statement of Mr. Haynes follows:]

PREPARED STATEMENT OF ARNE L. HAYNES, PRESIDENT AND CHIEF EXECUTIVE
OFFICER, THE RAINIER GROUP

Mr. Chairman, Members of Committee, thank you. I support the Brownback bill. My name is Arne L. Haynes. I am President and CEO of The Rainier Group. We have served telephone customers in the foothills of Mount Rainier (Washington) since 1910. My Great grandfather Pete won the Company in a pinochle game in 1912. I am the fourth generation manager and my son just joined the Company to lead our Interactive Media effort.

Our operations include:

- Mashell Telecom 3800 access line
- Rainier Connect:
 - 400 facilities based CLEC customers
 - 1000 cable television customers
 - 1000 Internet customers
 - 2600 long distance customers
- MercedNet:
 - Merced, California fixed wireless and CLEC
 - Ocala, Florida fixed wireless and CLEC
 - Merced Interactive Media—web content

We compete with AT&T, Qwest (US West), a myriad of other IXC's and Internet Service Providers. We will soon compete with Pacific Bell and Bell South. We have 50 employees, triple our size since the 96 Act. We need relief from regulation! (Federal and State)

- We were strictly an ILEC prior to The Act.
- Regulation impedes our growth.
- Regulatory costs are obscene.

There is no "Digital Divide" in our Washington State operation. We provide cable modem service and will roll out DSL to 100% of our service area in the next 90 days.

I am either very bright for developing a data ready network or stupid for investing millions of shareholder dollars in plant that I must give to "competitors" at below cost rates.

I believe The Brownback bill will allow us to continue to expand our operations. Without the deregulatory aspects of the bill, we fear that our Washington operations will be severely harmed and expansion curtailed.

Simply stated, a competitor using our facilities at ridiculously low costs, can price their services below ours. Few, if any, of our costs go away. Residual customers will have to pay much higher rates. This is Robin Hood stealing from the poor to give to the rich!

I started our data focused expansion at the same time I rejoined the Company. I never dreamed that regulators would become so unfair and unreasonable. If the current regulatory climate persists I may not be able to continue to invest share-

holder money in our ILEC beyond the minimum required to meet plain old telephone service (POTS) obligations.

Meanwhile, our competitor, little old AT&T, has little or no regulation or requirement to unbundle their digital facilities. Subsequent to the 9th Circuit Court decision, why should my advanced services be subject to regulation and not theirs?

The Brownback bill has one other aspect that I am more schizophrenic about. Our first CLEC operation does not have a Reciprocal Compensation element. Our newest one will. We could make a lot of money with Reciprocal Compensation.

However, Reciprocal Compensation is unsustainable. When business plans require windfall profits for success justice will ultimately prevail. This bill justifiably eliminates an unfair and unreasonable loophole in existing regulation.

The elimination of regulation included in this bill will allow me to better see the future opportunities to expand our services in our Washington operations. Today, the uncertainty and unreasonableness of regulation makes further investment considerably more risky. It took our Company ten years to build a data ready network. Regulatory errors could destroy that in months.

One aspect of the bill that needs enhancement is the pre-emption of State regulators in the same manner as federal.

State regulators get many of their misguided notions from the FCC. Further, they are drooling to fill any vacuums created by less Federal regulation. Frankly, they are a bigger threat to our companies than the FCC. Any one of my employees knows better how to meet our customers' needs than anyone in regulation.

Please let market forces work by passing the Brownback bill with the requested State regulatory pre-emptions.

Thank you.

Senator BROWNBACK. Thank you, Mr. Haynes, for joining us today. Mr. Taylor, thank you for being with us.

**STATEMENT OF ROBERT TAYLOR, PRESIDENT AND CHIEF
EXECUTIVE OFFICER, FOCAL COMMUNICATIONS,
AND CHAIRMAN, ASSOCIATION FOR LOCAL
TELECOMMUNICATIONS SERVICES**

Mr. TAYLOR. Thank you, Mr. Chairman and Members of the Committee. My name is Robert Taylor. I am the CEO of Focal Communications, as well as the Chairman of the Association for Local Telecommunications Services, also known as ALTS. ALTS represents approximately 100 facilities-based CLECs across the United States, including wire line companies that offer both circuit-switched, packet-switched, and wireless connectivity to circuit-switched and Internet-based networks, as well as DSL companies that provide many of the broadband services we are talking about today.

Focal itself is a facility-based carrier offering services in 19 markets across the United States, with plans to enter 24 by the end of next year.

I certainly welcome the opportunity to appear here today on behalf of these competitive carriers and to explain why S. 2902 is in our minds anticompetitive and unnecessary. Certainly if any Congressional action is needed, it is action that will provide for stronger enforcement of the Act. I think as you have heard from the other three panelists here, a lot has been done in the last four years. We have accomplished a lot. Companies like SBC have rolled out DSL to millions of their potential customers.

We are seeing it happen in both big cities as well as in rural markets. Some ALTS members serve rural markets. Companies like McLeod USA are providing broadband services in Iowa and other rural States today.

The Act certainly is and was the most important piece of telecom legislation since the original Communications Act of 1934, and you the members of this committee should take great pride in what you have accomplished. Since the act was passed, over \$30 billion of new capital has been raised and put in the ground to provide new broadband services to customers across this country. The competitive bricks and mortars have meant lower prices, better services, and the revenues of the competitive telecom industry have exploded from less than a billion dollars before the act to almost \$6.5 billion in 1999, and CLECs now employ over 70,000 people across the United States. Clearly, a fabulous success.

ALTS and its member companies believe that there is really no need for new legislation, that competition is happening, we are beginning to see the results of it, the numbers are very measurable, and the successes are growing every day.

For example, in one recent Wall Street report SBC was listed as offering DSL services to 14.5 million customers as of June 30th of this year. That is up from 12.8 million customers at the end of the first quarter. In three months they added two million potential subscribers to their network. That is a pretty fast rollout of high speed broadband technology and I think companies like SBC should be commended because they are fulfilling the mandate of the Telecom Act.

All of this deployment is occurring without any changes. We are all as a competitive industry, both the RBOCs, the small incumbents, and the competitive carriers, building network as fast as we possibly can. You can go knock on the door of Lucent or Cisco or Nortel and look in their warehouses; there is not technology sitting on the shelves. Every bit of chips and fiber and switches being made today is being put in the ground by one of the companies represented here today. We are building and working on the mandate that you gave us in 1996 as fast as we possibly can. It simply cannot go any faster.

Now let me turn to the specific concerns. First, we think the legislation attempts to establish a different regulatory regime based upon the technology deployed. This is going to create some significant problems between the have's and the have-not's simply defined by the technology that they use. S. 2902 would limit the provisions of the 1996 Act as it was designed to open competition not only in the circuit-switched arena, but in all aspects, because when we look at DSL service today, while there are many different providers, all of the facilities, all of the access to the customer, is controlled by the Bell operating company. So there still is a bottleneck out there that needs regulatory oversight.

The distinction based upon service or technology would virtually ensure the monopoly control, Bell's continuing monopoly control, not over older services but over all of the new services. Redefining the pieces of the network that they use today and calling it broadband simply changes their ability and their need to open it up to new competitors, represented by ALTS.

Second, the legislation removes State and Federal regulatory oversight for almost all of the services provided by the local incumbent exchange carrier, even though that carrier today is still virtually a monopoly. In most markets the incumbent still has over

95 percent of the customers in the market. Competition is beginning. It is not there yet. When we look at the CLEC industry as a whole, I think as of the end of last year, there was only one CLEC out there today that was profitable. This is a long-term business. It takes long-term investments and it is going to take a while for this to be a profitable business. But we think the investments are there, the opportunity is there, and it is a sound business to be in.

Third, the bill would prohibit any payment of compensation related to the transportation and termination of calls to the Internet service providers as it is defined today in reciprocal comp. Reciprocal compensation was not the CLECs' design. The rates were not set by the CLECs. The rates were set by the Bell operating companies. The CLECs had asked for zero. The payments that are being made today would have been zero if the plans that the CLECs had proposed four years ago would have been put in place.

But, given that, the rates have fallen dramatically from where they were at a penny a minute at the creation of the act to now in some States one-tenth of a cent a minute. So the rates for reciprocal compensation have fallen dramatically and these are contractual relationships, and the process is working.

Fourth, the legislation would not require one dime of new investment in broadband facilities. Certainly it changes some of the rules on which people operate, but it does not force them to do more. Clearly, if that is the goal of the bill, it does not accomplish that in our minds.

To keep the exemption for packet-switched services, the bill requires that an incumbent carrier demonstrates after three years that it can reach 80 percent of the customers using an industry-approved standard and existing loop facilities. The same is true of the five-year test.

But not all customers are served by incumbents. Moreover, those customers can be served using existing technology. It is the existing technology that we need access to, because we will deliver the service using the existing technology and the incumbents are doing it and between the two of us we will get there.

Finally, the legislation is not needed to speed the deployment of advanced services. As demonstrated in the press releases of many of the RBOCs themselves, they are deploying DSL services as fast as they can. There is no new need for incentives from a legislative standpoint to get that to go any faster. In fact, as we talk to the manufacturers, there is not the availability from a manufacturing standpoint to build more chips and to build more technology.

The limiting factor is not the regulatory impediments. It is the suppliers, it is the labor market, it is the fact that you guys have created a really good economy. That is the challenge that is out there today. Deployment is occurring under the existing laws in large measure due to competitors like ICG, Focal, and other ALTS members. The message from this rapid deployment is crystal clear: No change is needed in the Act. Congress should stay the course and market forces will provide the results that you guys are looking for.

Thank you very much and I appreciate my opportunity to speak here and will certainly answer any questions.

[The prepared statement of Mr. Taylor follows:]

PREPARED STATEMENT OF ROBERT TAYLOR, PRESIDENT AND CHIEF EXECUTIVE OFFICER, FOCAL COMMUNICATIONS, AND CHAIRMAN, ASSOCIATION FOR LOCAL TELECOMMUNICATIONS SERVICES

Thank you Mr. Chairman and Members of the Committee. My name is Robert Taylor and I am the CEO of Focal Communications and the Chairman of the Association for Local Telecommunications Services, more commonly known as ALTS. Focal is a facilities based competitive local exchange carrier (CLEC) doing business in nineteen major markets across the nation, with plans to be in twenty-four markets by the end of the year. We were founded in 1996, and are a direct result of the enactment of the Telecommunications Act of 1996 (the '96 Act).

ALTS represents approximately 100 facilities-based CLECs. These include wireline companies like Focal which offer both circuit and packet switched services, wireless companies that offer both circuit and packet switched services, and data CLECs, which specialize in packet-switched data and Internet services. I welcome the opportunity to appear here today on behalf of the facilities-based local competitors to explain why S. 2902 is anti-competitive and unnecessary, and to show why the carefully crafted market opening provisions of the '96 Act will continue to foster local competition and broadband deployment without any amendment.

The '96 Act was the most important piece of telecommunications legislation passed by Congress since the original 1934 Communications Act, and members of this Committee should take great pride in what they have accomplished. Thanks to the '96 Act, the competitive local telecommunications industry has raised the capital to build over 30 *billion* dollars worth of new local infrastructure, the competitive "bricks and mortar" that mean lower prices and new choices for local telephone consumers.¹ Local revenues for CLECs have exploded from less than one billion dollars in 1996 to more than 6.3 billion dollars in 1999, access lines have climbed from approximately one million in 1996 to over 10 million in 1999,² and CLEC employees now exceed 70,000.³ Of course, the competitive industry would prefer to move even faster, but it is manifest that the '96 Act has jump-started competition in local telecommunications markets.

ALTS and its member companies believe that there is no need for new legislation to change the '96 Act. Competition for local services is already happening, and the incumbent local exchange carriers, and in particular the Regional Bell Operating Companies (RBOCs), are rolling out new competitive services at an amazing rate. For example, in one recent financial report, SBC Corporation was listed as offering high speed Digital Subscriber Line (DSL) service to 14.7 million customers as of June 30, 2000, up from 12.8 million on March 31, 2000. Two million new customers with the opportunity to purchase DSL in the space of three months is definitely not a slow roll-out of service. The same report states that SBC has installed DSL equipment in 75% of the 1,300 central offices in which they plan to offer DSL service.⁴ All without any change in the '96 Act.

In fact, the best way to speed the roll-out of DSL and other high-speed Internet services is for Congress to demand better enforcement of the '96 Act. The biggest impediment to even faster competitive deployment of high speed Internet access is the incumbent carriers themselves. They have repeatedly attempted to slow down, or avoid entirely, the implementation of the market-opening requirements of the '96 Act. Better enforcement would speed the interconnection of networks and the offering of new services, which will mean more choices and lower prices to consumers.

Many of the legislative proposals pending before Congress, including S. 2902 as introduced and as shown in various staff drafts, will slow broadband deployment. By removing essential elements of the '96 Act, these legislative proposals will make it more difficult for competitors to be able to access all but the most lucrative business markets. This in turn reduces the competitive pressure that has prompted the RBOCs and other incumbents to offer DSL services at all.

With that background, let me turn to the subject of today's hearing—S. 2902, the Broadband Internet Regulatory Relief Act of 2000. Focal and ALTS are opposed to S. 2902 because it would seriously undermine the key local market entry provisions

¹*The State of Competition in the U.S. Local Telecommunications Marketplace*, ALTS Annual Report, February 2000, Graphic F.

²*Id.* at Graphics I and J.

³*Id.* at Graphic F.

⁴*Bear Stearns Investment Opinion*, as published by First Call Research Notes, 7/21/2000.

that Congress so carefully crafted in the '96 Act. If this bill were enacted, 30 billion dollars in new investment and 70,000 new jobs, not to mention greater choice for consumers, would be put at serious risk due to the near monopoly this legislation would permit to be re-established.

Summary of ALTS' and Focal's Opposition to S. 2902

S. 2902 would eliminate many of the core market opening requirements of the '96 Act. ALTS and Focal strongly oppose S. 2902 for the following reasons:

First, the legislation attempts to establish different regulatory regimes based on the technology used to deploy a telecommunications service, under the mistaken belief that packet switching is a new technology and that the incumbent carriers cannot use their existing monopoly to gain a market advantage in this "new" service. Nothing could be further from the truth. This approach would relegate the key pro-competitive provisions of the '96 Act to older circuit switched technology and would seriously undermine competition using new technologies. This approach was firmly and properly rejected by Congress in the '96 Act.

Second, the legislation would remove Federal and State regulatory oversight of almost all services provided by the incumbent local exchange carrier, even though that carrier still has a virtual monopoly. In most markets, the incumbent carrier still serves over 95 percent of the customers in the local market. This approach fails to recognize the tremendous market advantage that the incumbent gains from being able to invest in new services while maintaining a captive revenue stream from its huge customer base. That base is not the result of competition; it is a direct and ongoing legacy of the government granted monopoly on local communications service that was eliminated by the '96 Act. Congress recognized that the incumbents have a huge market advantage, and as a result forced the incumbents to provide interconnection and unbundled access to their monopoly networks.

Third, the bill would prohibit the payment of *any* compensation to competitive carriers for their costs of transporting and terminating calls to an Internet service provider. These costs are real. In addition to being unconstitutional, this provision of the bill would result in decreased choices for Internet service providers and increased costs to consumers for Internet access service.

Fourth, the legislation would not require one dime of new investment in broadband facilities by the incumbent local exchange carriers. As drafted, the bill provides extensive regulatory relief on the date of enactment, without any advanced services being required to be provided whatsoever. In order to keep that relief in perpetuity, the bill requires that an incumbent carrier demonstrate after three years that it can provide advanced services to 80 percent of the customers it can reach with such service "*using an industry approved standard and existing loop facilities.*" The same is true in the five year test. In both cases, even if the incumbent makes no new investment, the test is limited to 80 percent and 100 percent, respectively, not of all customers served by the incumbent, but rather of those customers it can reach using "existing" facilities and technology. In fact, the July 18 draft explicitly recognizes that many customers will not be able to be reached with "advanced services,"⁵ so the regulatory relief is expanded to include slower, 10 year old ISDN technology.

Fifth, this legislation is not needed to speed the deployment of advanced services. As demonstrated by the press releases of the RBOCs themselves, they are already deploying new DSL services as fast as they can. The primary limiting factor for them is not any regulatory impediment; instead it is the tight labor market for trained technicians and their own failure to respond to customer demands. This deployment is occurring under existing law, in large measure to meet competition from providers like Focal and the cable modem services now being offered by cable companies. The message from this rapid deployment is clear—no change is needed in the '96 Act. If Congress stays the course market forces will provide the result this legislation purports to seek.

1. S. 2902 Repeals Many of the Key Market Opening Provisions of the '96 Act

A. *The legislation creates different regulatory regimes based on a confusing and unworkable hierarchy of circuit-switched, packet-based, packet-switched, advanced services, and fiber optic technology.*

The '96 Act had two key sets of provisions designed to open up the local telecommunications market to competition. One set is embodied in sections 251 and 252,⁵ which require each incumbent local exchange carrier (i.e., those that had a

⁵ 47 U.S.C. 251 and 47 U.S.C. 252. References to sections in this testimony refer, unless otherwise noted, to sections of the Communications Act of 1934 (codified at 47 U.S.C. 151 et seq.).

monopoly on local service when the Act was passed) to negotiate agreements with competitors that permit the competitor to 1) interconnect its network with the incumbent's network; 2) purchase pieces of the incumbent's network needed to provide service (these pieces are called unbundled network elements or UNEs, and include loops, switching, and transport between exchanges); 3) resell the incumbent's service at wholesale prices; and 4) collocate equipment needed to interconnect or access unbundled network elements.

The second set of key provisions are found in section 271,⁶ which was designed to act as an incentive to encourage the largest of the local monopolies—the RBOCs—to cooperate with competitors and comply with the section 251 requirements. The “carrot” was entry into the long distance market, which the RBOCs were prohibited by the courts from entering prior to the '96 Act. In the '96 Act Congress agreed to remove the court restriction, and to permit entry into the long distance market, as soon as the Federal Communications Commission (FCC) determined that the RBOC faced real competitors and had met a “competitive checklist” that demonstrates compliance with the market opening requirements of section 251.

S. 2902 effectively repeals many of the requirements of section 251 with respect to packet-switched network technology, and in doing so significantly undermines the incentive for compliance provided in section 271 by removing packet-switched technology from the competitive checklist. Packet-switched networks have been used in the industry since the 1980s, and packet switching is the technology being most widely deployed by incumbents and competitors alike today. There is nothing new or innovative about this technology—it is at the heart of all major Internet backbones and local networks. Furthermore, the RBOCs having been using DSL technology to provision standard T-1 service for over a decade.

The proposed legislation creates four different—and ultimately unworkable—standards that would be applied to different provisions of section 251. Under S. 2902's proposed new section 652(a)(1), the incumbent local exchange carrier would be freed from any requirement to negotiate with competitors or permit them to interconnect their networks with any “packet-based functionality” of the incumbent's network.

This exemption would be very difficult to implement in the real world. For example, Focal presently provides state-of-the-art circuit switched services to our customers. Essential to providing these services is a packet-based network largely operated by the incumbents called Signaling System 7 (SS-7), which provides call setup, monitoring, and termination. If incumbents no longer have to interconnect their SS-7 network with Focal's network, the quality of circuit switched services would be seriously compromised.

In addition, many circuit switched networks use packet-switched networks for calls over longer distances. ATM packet networks in particular are designed to carry all forms of traffic, including circuit switched voice. Today many circuit switched calls are in fact carried part of the way to their destination on packet-switched networks, further illustrating how difficult it will be for the FCC and the courts to interpret this exemption.

Next new section 262(a)(2) would permit the incumbent to refuse to provide UNEs, the essential piece parts of the network, if a UNE “consists of or is created by a packet-switched or successor technology.” This standard could be argued amongst engineers for a considerable time, and you can be certain it will take years for the FCC and courts to determine what it means. As mentioned above, the SS-7 signaling network is a packet-switched network, and is presently a UNE required to be provided under the FCC's rules implementing section 251.⁷

Likewise, DSL service is clearly a “packet-switched” technology. Under new section 262(a)(2) and 262(a)(4) it is not clear exactly how DSL service will be able to be provided. In addition to packet-switched UNEs, CLECs also need to collocate equipment, like DSL access multiplexers, also called DSLAMs, in incumbent central offices or remote terminals in order to use existing copper loops to provide DSL services. For example, “line sharing,” which data CLECs use to provide high speed Internet access to consumers over the same line that the incumbent provides voice service, would no longer be possible under this language. This gives the data affiliate of an incumbent a tremendous competitive advantage, since they can provide DSL service over the same line that an incumbent uses for voice, while CLECs must

Most of the provisions enacted in the Telecommunications Act of 1996 (Pub. L. 104-104), for example sections 251, 252, and 271 referred to in this testimony, were amendments to the underlying Communications Act.

⁶ 47 U.S.C. 271.

⁷ 47 C.F.R. 51.319.

have the customer purchase an additional line, for an additional fee, in order to provide their DSL service.

Regardless of where the line is ultimately drawn, it is clear to me what the intent is. That is that competitors only get access to the monopoly network if they stick to the older, slower circuit-switched technology that is not capable of providing the high speed, broadband Internet access that business and residential consumers are demanding.

In the case of resale, new section 262(a)(3) proposes that “advanced services” be exempt from the wholesale rate obligation that Congress decreed for incumbent carriers. “Advanced services” are defined as “any service that consists of, or includes, the offering of a capability to transmit information using a packet-switched or successor technology” at speeds of 200 kilobits per second or more in both directions. This definition includes all but the slowest of packet-switched technologies, and is yet a third formulation of a standard based on a specific technological criteria. Without the option of resale as a means to expand their market presence, this legislation removes a tool that Congress provided in the ’96 Act for competitors to test markets and offer service in areas where they may plan to deploy facilities, but have not yet had the time or resources to do so.

Finally, S. 2902 applies a fourth standard in new section 262(a)(5) when fiber optic wire is used. If an incumbent chooses to deploy fiber into its network to increase its own cost efficiency or expand its capacity, it gets an automatic exemption from the interconnection and UNE requirements of section 251 for the area served by that fiber optic wire—regardless of whether that wire is used for circuit-switched or packet-switched service.

This confusing and unworkable set of standards is precisely what Congress did not do when it enacted the ’96 Act. Congress decided to be “technologically neutral”—which is the right thing to do. This technological neutrality is evident in the language of the statute. The ’96 Act adopted the Senate definition of “telecommunications,” which the statement of managers accompanying the final legislation described as meaning “the transmission . . . of information of the user’s choosing, including voice, data, image, graphics, and video”⁸ Further, a “telecommunications service” is the offering of telecommunications to the public for a fee, “regardless of the facilities used.”⁹

If Congress had intended to draw the type of distinction among technologies proposed in S. 2902, they would have done so. But they did not. Instead they took the opposite approach. In section 251 itself they included two standards—the “necessary” and “impair” standards which were discussed at length by the Supreme Court—for the FCC to use in determining when a particular technology or facility need not be made available to competitors under section 251.¹⁰ In section 254, regarding universal service, the Congress directed the Commission to establish an “evolving level of telecommunications services” to be given universal service support based in part on how widely used those services are in the public networks.¹¹ And in section 706, which this Committee has had several hearings on, they again made clear their preference for technological neutrality.¹² Nothing has changed in the four years since the ’96 Act was adopted to suggest that such a radical change in approach is needed. To the contrary, the ever increasing levels of broadband deployment make it clear Congress got it right the first time.

B. Competitors would only get access under section 251 to older circuit switched technology, which is being phased out as networks shift to IP packet-switching.

One of the most important provisions of the ’96 Act is the requirement that incumbent local exchange carriers provide access to UNEs, such as loops, switching, and transport needed to provide service. In order to compete effectively with the incumbents, CLECs need to be able to deploy the latest and most efficient technologies that consumers are demanding. It is difficult enough to compete with an entrenched monopolist even if the competitor has superior technology—if Congress limits the technology that competitors can use to compete with the incumbent, the task becomes nearly impossible.

Congress understood this need back in 1996 when it required access to UNEs on a technologically neutral basis. Congress believed that requiring this access was an important key to ensuring that the local markets would eventually become competitive. If CLECs are able to access UNEs from the incumbents, they can then combine

⁸ Senate Report 104–230, p. 114 (1996).

⁹ 47 U.S.C. 153(46).

¹⁰ 47 U.S.C. 251(d)(2).

¹¹ 47 U.S.C. 254(c)(1).

¹² Section 706 of the Telecommunications Act of 1996, codified at 47 U.S.C. 157 note.

the UNEs in the most efficient manner in order to provide high quality telecommunications service to consumers.

By exempting packet-switched technology from section 251, Congress would relegate CLECs to only one of the two prevailing telecommunications technologies, which will severely undermine competition in the local markets. While CLECs would be able to continue to provide fierce competition in the voice market, they would be limited in their ability to continue to expand into data and high speed Internet access that consumers are demanding. Without access to UNEs competitors would have to raise even more capital than they have to date, in order to further expand their networks in order to provide packet-switched services. Basically, Congress would be slowing the pace of competition for data and Internet services—it would be limited to those areas where CLECs have their own independent networks, which are primarily in the business districts of large metropolitan areas.

At the same time, the incumbents do not face the same difficulties gaining access to capital. Because the incumbents already have a network in place, which was built through years of monopoly funded revenue, they already have the basic infrastructure needed to provide service. In addition, they have a captive customer base from which to obtain revenues to finance the purchase, installation, and advertising of new packet-switched services.

Congress recognized the unlevel playing field faced by competitors in the local market. The '96 Act required incumbents to provide UNEs so that competitors could compete without having to build an entire network first. At that time, Congress rightly concluded that competitors would deploy their own facilities as soon as it was financially possible to do so, in order to increase their revenues and the quality of their services. It took the incumbents decades to build out their networks with the benefit of a guaranteed monopoly. While technology has improved, it is ludicrous to think that competitors could obtain the capital, capture a dominant market share, or deploy the resources needed to overbuild the existing networks completely.

C. Competitors would not even be able to obtain local loops for packet switched services like DSL.

One tragic consequence if this bill is passed would be the very detrimental impact it would have on DSL services—one of the success stories of the '96 Act. DSL is a high-speed Internet access service that allows telephone customers to obtain Internet access at speeds that are 20 to 100 times faster than a typical dialup modem. S. 2902 would deny CLECs the ability to provide DSL service by removing the requirements that incumbent local exchange carriers permit the purchase of the high frequency portion of a loop used to provide packet based data services (a practice called "line sharing").

Although DSL technology has been available for a number of years, the incumbents had failed to bring the technology to the market. It was not until the passage of the '96 Act that data CLECs, which are often called DLECs, were born. The DLECs saw the '96 Act as an opportunity to fill a missing void in the market—and their vision was sound. The entry of the DLECs (and the fierce competitive pressure) inspired the incumbents to begin offering DSL services as well. Today, the top eight providers of DSL services (including incumbents and competitors) provide service to over 750,000 customers and the numbers are growing exponentially. Because of the appeal of the service and its rapid deployment, over half of U.S. households are now capable of receiving DSL services.

This service may never have been brought to the marketplace if it wasn't for the vision and key market opening provisions of the '96 Act. In order to provide DSL services, the DLECs need to collocate their equipment in the incumbent carrier's central offices and the need to obtain conditioned local loops. The '96 Act required incumbents to provide both of these necessary items to the DLECs. Without these requirements, DLECs would never have been able to begin offering DSL services, and such technology would most likely still be sitting on the incumbents' shelves.

New section 262(a)(4) would completely take the wind out of the DLECs' sails. Because DSL is a packet-switched service, the proposed bill would not require incumbents to continue to provide collocation for the equipment needed to use the local loops to provide DSL service. While the bill does continue to require that competitors get access to copper loops, without both collocation and local loops, DLECs can't provide DSL. This would be a particularly tragic result since DLECs pioneered the service and currently have about 25% of the market. This is an area in which the '96 Act genuinely spawned innovation and competition, and this legislation would turn the clock backward on the progress DLECs have made.

D. Competitors would be forced to duplicate much of the local network in each area before they could offer service to a single customer.

It is not surprising that most CLECs would not find it appealing to offer service to customers solely through the use of older circuit-switched technology. Because new section 262(a)(2) would exempt the incumbent carriers from having to provide UNEs for packet-switched networks, the only other choice would be for the CLECs to build the networks themselves.

This is precisely a result that the '96 Act sought to avoid. Congress recognized in 1996 that there are a number of reasons to require incumbents to provide competitors with access to its networks. Most important, is that these networks already exist. Although CLECs do build networks, because they are able to rely on UNEs they do not have to build networks as extensive as those of the incumbents before being able to offer service. The incumbents were able to build ubiquitous local networks with revenue streams generated by their monopoly service. Since the networks already exist, it would be inefficient and unnecessary to require every CLEC to build extensive networks that would essentially duplicate the incumbents' network. Further, it would raise the cost of service to consumers, who have already paid once (at monopoly rates) to have a ubiquitous telecommunications network built.

Under S. 2902, any CLEC desiring a network based on packet-switched technology would have no choice but to build its own network from scratch. Not only is this an inefficient result, it is also prohibitively expensive. Far more than the 30 billion dollars already raised by the competitive industry, and many more years or decades, would be required before most Americans would have a competitive choice. By way of analogy, the approach suggested by S. 2902 would be as if Congress told new airline competitors they can have access to the existing airports and terminals, but only if they use propeller planes. If they want to use jets, then they get access to the runways but not the taxiways or terminals. Those the competitors would have to build themselves before they could offer any jet service at any airport. The impact of this proposed legislation would likely be to take us back to the day where all we had was a monopoly local phone company.

E. By limiting the market opening requirements to circuit switched networks, the legislation alters the "competitive checklist" in section 271 and significantly lowers the bar for RBOC entry into long distance.

The '96 Act created a delicate balance in enacting section 251 and section 271. Section 251 set forth all of the market opening requirements, the "stick" so to speak. Section 271 proposed the "carrot"—that if the RBOCs complied with section 251 and is genuinely open to competition in its local market, it would be able to enter the interLATA market—from which it had been barred since 1984. Therefore, sections 251 and 271 are intricately intertwined. It is impossible to change one without impacting the other. In this instance, the proposed exemptions from section 251 will allow RBOC entry into long distance prior to the implementation of real competition in the local exchange market.

It is true that the opening of the local markets have been slower than competitors would have liked. Much of that is due to the resistance of the incumbents in opening their markets to competition. Rather than embrace the opportunity for genuine competition in the local exchange markets, the RBOCs in particular have thwarted competition at every opportunity.

Notwithstanding such resistance, CLECs have begun to prevail and make a genuine dent in the local markets. One analyst estimates that CLECs will serve about 20 percent of the local lines (approximately 3 million lines) in New York by the end of this year. That is a substantial increase from the 7 percent of local lines that CLECs served in New York at the end of 1999 (approximately 1 million lines). Not by coincidence, New York is also the first state for which the FCC found that an RBOC met the requirements of the section 271 competitive checklist. The "carrot" worked—competitors have access to the ILECs network to compete in New York, and the RBOC now has permission to compete in long distance.

Not all parts of the country are progressing as well as New York. If this proposed legislation is implemented, progress throughout the country is sure to be halted. Without the carrot, there is no incentive for an RBOC to comply with the market opening requirements, which is why the RBOCs are so eager to see S. 2902 adopted.

2. S. 2902 Provides Immediate Regulatory Relief Despite the Fact that Incumbent Local Exchange Carriers Still Have a Monopoly

New section 262(c) would provide relief from any "common carrier" regulation by the FCC or any State of an incumbent local exchange carrier's provision of "advanced services." This means that all of an incumbent carrier's new investment, and

a significant portion of its existing network, would be freed from any regulatory oversight. In effect, for all packet-switched services over 200 kilobits per second both Federal and State laws governing telecommunications would cease to apply to incumbent local exchange carriers. While no State commission is testifying at this hearing, it seems likely that the States would have serious reservations about this blanket Federal preemption of their jurisdiction over local telecommunications services.

Absent some common carrier oversight, incumbent carriers would be free to decide whom to serve, at what price to serve, and discrimination of almost any type would be perfectly legal. They could also decide to cease or restrict the provision of services to certain ISPs or consumers, and there would be nothing the Federal or State authorities could do about it.

Ironically, the CLECs and long distance companies that do not have the vast majority of the local customers would still be subject to State and Federal common carrier requirements, including offering non-discriminatory service to ISPs. The incumbent carriers sought very similar relief during the deliberations on the '96 Act, and Congress wisely rejected their request. Nothing has changed in the intervening four years that would justify revisiting that decision.

A. RBOCs and GTE get regulatory relief as soon as a competitor offers advanced services in each market.

Once again S. 2902 chooses to apply different standards to the same problem. In the case of the RBOCs, GTE, and a few other large carriers, new section 262(c) would grant unbridled freedom on a piece by piece basis. As proposed, whenever a CLEC begins offering "advanced services" in a particular telephone exchange area to just one customer, the incumbent is granted relief from all State and Federal common carrier regulation in that exchange area. Once free of the common carrier obligations to interconnect on just and reasonable terms and not to unreasonably discriminate, requirements that still apply to the CLEC, there is little doubt that the incumbent will be able to dominate the local market for advanced services, just as they do today for circuit switched voice services.

B. All other ILECs get immediate relief from common carrier regulation and the market opening requirements of the '96 Act as soon as the legislation is enacted.

In the case of the over 1,000 incumbent local exchange carriers throughout the country who each control less than 2 percent of the nation's total telecommunications access lines, S. 2902 doesn't wait until a competitor arrives on the field. Instead, section 3(c) of S. 2902 would grant these "less than 2 percent" carriers immediate relief from all State and Federal common carrier regulation. This legislative relief would ensure that consumers in the markets served by these smaller incumbent carriers never get a choice of provider.

In both cases, should an incumbent fail to provide loops to competitors seeking to offer circuit switched services, new section 262(c) provides that a CLEC may petition to have the incumbent's exemption removed if they fail to provide collocation for circuit switched services or access to local loops. However, the burden of proof falls on the CLEC to show that the incumbent has not been cooperative, and the infractions must be proved by "clear and convincing evidence," a judicial threshold that is difficult to meet in the best of circumstances, much less when a competitor may lack the financial and legal resources available to an incumbent monopolist.

In contrast, if an incumbent should ever have its exemption revoked under the "clear and convincing evidence standard," that incumbent is free to petition a State to have the exemption reinstated. In this case the burden is on the State to show why the exemption should not be reinstated, and if the State fails to act within 90 days, the exemption is automatically restored. Why the legislation chooses to impose a much easier standard on reinstating the exemption than on removing is not clear, but if adopted it would certainly indicate a strong bias on the part of Congress against competitive providers.

3. Compensation for ISP Traffic is Prohibited.

Section 3(a) of S. 2902 would amend section 251(b) to prohibit the payment of any compensation between carriers for the completion of a call from a consumer to an Internet Service Provider (ISP). Inter-carrier compensation is necessary in competitive local markets because the carrier serving an end user making a local call may be different from the carrier serving the called party. Since terminating carriers receive no additional revenue from end users, the '96 Act requires "reciprocal compensation" to be paid when two different carriers complete a local call. The originating carrier, who collects a fee from the consumer, must compensate the terminating carrier for their variable costs in completing the call.

Reciprocal compensation applies any time one carrier originates a call and another carrier terminates a call. The arrangement applies to cellular calls as well as local calls. In a cellular environment, the cellular company compensates the incumbent local exchange carrier for its costs of terminating the call. The same regime currently applies to calls to the Internet. If the call is originated by an incumbent carrier's customer and terminates on a CLEC network to an ISP, the incumbent compensates the CLEC. The same would apply in reverse if a CLEC customer called an ISP served by the incumbent, hence the term "reciprocal" compensation. It is not the volume of traffic that is reciprocal, it is the obligation to pay each other the same rate for terminating calls on each other's networks.

By prohibiting the payment of any compensation to competitive carriers for their costs of transporting and terminating calls to an ISP, S. 2902 mandates the use of a "bill and keep" arrangement that was considered, but not adopted, by Congress in the '96 Act and by the FCC in implementing the '96 Act. This legislation is anti-competitive, unnecessary, and would have very troubling consequences on competition in the local markets.

A. Prohibiting recovery of costs for terminating calls to the Internet is anticompetitive and possibly unconstitutional.

As the RBOCs and the FCC have recognized, "carriers incur costs in terminating traffic that are not *de minimis*, and consequently bill-and-keep arrangements that lack any provisions for compensation do not provide for recovery of costs."¹³

In addition, because there are real costs involved in terminating this traffic, prohibiting recovery of those costs would likely violate the Fifth Amendment's prohibition against the "taking" of private property. The RBOCs made this argument to the FCC when the '96 Act was being implemented. If bill and keep is unconstitutional in regards to the RBOCs, which enjoy many other regulated sources of revenue, it applies with even greater force for CLECs, which have no embedded monopoly markets or other revenue streams to fall back upon.

B. Eliminating reciprocal compensation would harm Internet consumers and the marketplace in general.

As I stated above, CLECs incur costs of carrying calls to ISPs. If CLECs cannot receive payment for carrying these calls from the incumbent carrier, the CLEC will have to seek payment from someone else, most likely the ISP itself. The ISPs may have to flow through this cost increase to their consumers. Cost-based reciprocal compensation ranges around \$3–\$6 a month for an average household using the Internet, who pay an average of about \$17 a month. Flowing those costs through to end-users would thus mean an 18%–35% increase in the monthly cost of access to the Internet via CLECs.

Another alternative is that, if CLECs cannot be paid for providing this service to ISPs, CLECs may simply exit the market altogether. ISPs would be forced to return to receiving service from the incumbent telephone company, effectively remonopolizing the local market.

As this Committee is well aware, the Internet has become a huge engine of economic growth in America. Passage of legislation that either forces ISPs back to the monopoly providers, or else increases the cost of Internet access for millions of Americans by 18% to 35% is terrible public policy, pure and simple.

C. It was the RBOCs, not the CLECs who supported high reciprocal compensation rates three years ago.

The FCC initially proposed that the rates for reciprocal compensation should fall in the range of \$0.002 to \$0.004 per minute of usage. However, the RBOCs succeeded in obtaining a stay of the FCC's *Local Competition Order* in the fall of 1996. This enabled the RBOCs to demand much higher reciprocal compensation rates—around \$0.008/MOU to .0009/MOU—believing they would terminate more traffic than they would send to the CLECs. The CLECs had to obtain signed agreements from the RBOCs quickly in order to start requesting unbundled elements, interconnection, and the other facilities that they needed from the RBOCs to begin their businesses. Consequently CLECs had no choice except to accept the high rates demanded by the RBOCs rather than risk delay by litigating the issue.

D. The CLECs have a greater number of ISP customers because they have out-competed the RBOCs in the marketplace.

As the CLECs began to offer service three years ago, the ISPs were among the first customers to recognize the benefits of the CLECs' new technologies. ISPs have

¹³Local Competition Order, CC Docket No. 96–98, August 8, 1996, ¶ 1112.

determined that the CLECs provide better overall value—the combination of price and service. ISPs have consistently ranked the CLECs ahead of the RBOCs on their most important service parameters and have continued to award CLECs with most of the growth in ISP lines. Indeed, a CLEC like Focal has been so successful at meeting these needs in comparison to Ameritech that about one-third of the dial-up traffic to ISPs in Chicago is carried by Focal.

However, I would like to point out that the RBOCs obviously have the financial and technical resources to provide the same services to ISPs that CLECs provide—but have chosen not to do so. Nothing stops Ameritech from meeting or beating Focal's ISP services, and ending the traffic imbalance.

E. Reciprocal compensation rates are rapidly declining

Any issues regarding high reciprocal compensation rates are quickly disappearing. Several recent state arbitrations have reduced reciprocal compensation rates by at least 50%. Negotiated settlements reveal the same trend. While the rates contained in settlements are obviously driven by the needs of the particular carriers involved and do not necessarily reflect economic cost, several CLECs have recently announced settlement agreements with RBOCs that reduce their reciprocal compensation rates substantially, sometimes to 10% of the former rate level.

F. Any legislation would be premature and would undermine work that the FCC has undertaken.

The FCC is currently working through the issues raised by the D.C. Circuit Court's remand of the FCC's 1999 order regarding reciprocal compensation for calls to ISPs. Members of Congress requested the FCC to address these issues by September 30, 2000. The FCC last week accepted industry comments and I have no reason to believe that the FCC will not address these issues by September 30, 2000.

4. No New Investment is Required to Meet the Build-Out Requirements of S. 2902

New section 262(b) purports to establish a "build-out" requirement for incumbent carrier deployment of "advanced services." In order to keep the exemption granted by the bill from the market-opening requirements of section 251, an incumbent local exchange carrier must "make available advanced service" to 80 percent of its telephone exchange customers within three years, and be able to offer 100 percent of those customers such services within 30 days of a request after five years. However, language in the requirement ensures that it actually has little practical effect. This is the case because both the three and five year tests are limited to serving customers "where such services can be provided using an industry-approved standard and existing local loop facilities." In other words, the incumbent need offer advanced services to 80 and 100 percent of those customers within a specified distance of the central office, for example the 18,000 foot limit generally cited by the industry as the applicable limit for ADSL service. Those outside that distance, who are generally the customers in the less densely populated rural areas, aren't included in the test and the incumbent is not required to serve them. Depending on the exchange in question, 100 percent of an incumbent's telephone exchange customers could actually mean something much closer to 30 or 40 percent.

The legislation itself recognizes this fact explicitly, and takes steps to ensure that even this low threshold is no bar to continuing the exemption from having to comply with the pro-competitive provisions of the '96 Act. In those areas "where advanced service cannot be provided using an industry-approved standard and existing loop facilities" new section 262(b)(2) simply lowers the standard to the 128 kilobits per second provided using ISDN technology. The message here is clear for rural areas—the most advanced service consumers there can hope to see from the incumbent carrier 10 years after the '96 Act was adopted will be ISDN—a service that was long ago rejected in the commercial market as too slow and too expensive.

5. The Incumbent Local Exchange Carriers Are Already Deploying Broadband Services Without Any Change in the '96 Act.

The provisions in the '96 Act providing access for competitors to the incumbent carriers' networks for both circuit switched and packet-switched services, as well as the restriction on the RBOC provision of interLATA service, are not impeding the RBOCs' deployment of high-speed Internet access. All of the RBOCs are in the midst of very aggressive roll-outs of DSL service. This is in response to competition from the CLECs, DLECs, and cable companies, and is being accomplished *without any change to the '96 Act*. At the end of the first quarter of 2000 there were approximately 800,000 DSL lines in service in the United States. Approximately 75 percent of those lines are provided by incumbent carriers. Press releases issued by the

RBOCs confirm this deployment, and their intention to continue this roll-out as fast as they can.

It is interesting to note that the most rural of all the RBOCs, USWest, has been particularly aggressive in deploying DSL services. USWest recently issued a press release announcing its intention to offer DSL to 30 new markets, almost doubling the cities with its "MegaBit Services" in its region. USWest provides DSL service to over 150,000 customers and is able to provide DSL service to nearly 60% of the population in the company's 14-state region.

The newly merged Verizon Communications, recently announced that it was cutting the price of its most popular Infospeed DSL package by 20 percent—from \$49.95 to \$39.95 per month. Preliminary second quarter results reveal that Verizon has 221,000 DSL subscribers, 47 percent more than at the end of the first quarter. One of its subsidiaries, Bell Atlantic-New York has announced that it is "investing close to \$2 billion a year in [its] statewide network so that it can support exciting new technologies like DSL."

As mentioned earlier, financial reports for SBC show that they went from having 12.8 million DSL capable lines at the end of the first quarter of this year to 14.7 million DSL capable lines by the end of the second quarter. Also at the end of the second quarter, SBC reported 399,000 total DSL lines in service, for a net gain of 198,000 DSL customers in that quarter. Finally, SBC reports that it has already made 75 percent of its central offices DSL capable.

Late last year, BellSouth announced the successful completion of its deployment of its Internet service to 30 cities throughout the Southeast. The service is currently available to 7 million telephone lines that meet the technical specifications and plans call for a total of 11.5 million lines to be capable of delivering the service by the end of this year.

Therefore, contrary to any RBOC claims, it does not appear that they need regulatory or policy changes to deploy DSL services; what they need is more competition, which Congress should not diminish with this legislation.

Senator BROWNBACK. Thank you, Mr. Taylor.

We will run the clock on questions, if I could, for Members since newer Members have attended and keep this at 5 minutes each for questions if we could. So we could turn that on.

I wanted first to congratulate all of you and anybody associated with telecommunications in the room for the aggressive competition that is generally happening in telecommunications. That was what was envisioned in the Act and much of that is taking place.

The one problem and the whole focal point of the hearing is that we are not getting it in an area that I care deeply about, which is the rural areas across our country. We have historically as a nation decided as a part of public policy that we will not leave rural areas behind. Whether it is on rural electrification, rural telephony, any of these things, we have decided, while there may not be as much economic activity because of the density of population or whatever other issues, we are not going to leave them behind.

Yet, on the high speed data transmission, Internet access, they are being left behind. I wish that more of your testimony had been directed at that. But I would direct this particularly, if I could, to either Mr. Taylor or Mr. Bryan on this question. If you disagree with this statistic, then I would like to hear your number, because this one is so bad for rural areas.

According to one survey, more than 73 percent of cities with population of 500,000 to 1 million have cable modem and/or DSL service, but less than 5 percent of towns of 5,000 to 10,000 have cable modem service and less than 2 percent have DSL service. Those are the numbers that we have. That is what the bill is aimed at trying to get at.

Now, could either of you tell me how we could get those areas covered, then?

Mr. BRYAN. Let me just respond——

Senator BROWNBAC. And if you would direct it on that question, I would appreciate it.

Mr. BRYAN. I share your concern and I think one of the real ironies is people who live in rural areas probably in many instances require broadband more than maybe inner city dwellers. A lot of small businesses are run out of farms. They need this facility. It is not just an entertainment vehicle. It is actually access to a portal that is going to help their business. So I think you are right to be concerned about this.

I think very few people in this room would have had those concerns that you now have about broadband access to rural areas 4 years ago. It has only been the activity of the competitors and the innovators that have now raised this to the level of concern. You are concerned about it, we are all concerned about it, because we now realize there is an opportunity for people in the rural areas that no one would have considered had the innovators and competitors not gotten busy and emphasized the benefits and made these benefits available.

Now, those of us who are competitors have only been at this for 4 years and, as you know, 271 relief has only been given just recently, i.e., the ILECs have not been cooperating to let us compete in this marketplace.

Senator BROWNBAC. In rural areas?

Mr. BRYAN. Throughout the country.

Senator BROWNBAC. You have been able to compete in the urban and suburban ones.

Mr. BRYAN. With great difficulty. Hence the reason and the delay in getting 271 relief. I would say that any person in the competitive telephone industry—I am sure you have heard it in the past—has complained bitterly that at every step of the way it has been difficult for us to deal with the incumbents.

That is now changing, but for the first 3 years of our existence we have found it difficult to provide service in the cities——

Senator BROWNBAC. Mr. Bryan, if you could focus. We have got a limited period of time. Why are you not in rural areas?

Mr. BRYAN. Well, as we have started this activity 4 years ago, we are obviously going to the markets which are going to be initially more fertile. We have not had the benefit of being a monopoly for 100 years, but certainly it is not our plan to bypass the rural areas. My company actually has a nationwide network that is both in rural and in urban areas. But it is clear that the bulk of our business in the first 2 years is in the more densely populated areas.

We will certainly radiate out of that area into more rural areas over time, but we have only been in this business for a brief time period.

Mr. TAYLOR. Mr. Chairman, if I could add. Since the passage of the act there has been a lot of new companies that have been formed specifically to go after rural areas, companies like New Edge Networks, Jado, DSLNet, and TriVergent, all ALTS members.

In addition, having lived outside of Cedar Rapids in a small rural town, there are places where competition in broadband networks is being brought to rural areas. Of the 153 independent telephone

companies in Iowa, all of them have fiber. Every high school and junior college in Iowa has broadband connectivity to it today.

Senator BROWNBAC. But Mr. Taylor, do you disagree with these numbers that I read of the percentages?

Mr. TAYLOR. I cannot disagree with those numbers, but the problem is, if you simply take a look at a McLeod USA securities document, the amount of litigation that they have with US West, now Qwest, trying to get into rural markets is significant. Companies want to get into rural markets. It is difficult to do that.

If more enforcement of the original Act was done, we could get in there faster. There are some companies that are beginning to do it, but it is difficult to do it in Chicago and New York and Washington, D.C.

Senator BROWNBAC. Thank you, Mr. Taylor.

Mr. Ellis, how does the lack of regulation of broadband services offered by cable companies make such services more competitive than DSL services offered by your company?

Mr. ELLIS. Senator, I will be pleased to answer that. I would like to just make a comment, if I could, on the answers that were just given, because I think the experience of both these companies makes a point on reciprocal compensation. It is not a question of these companies not serving rural customers. These companies serve primarily and perhaps almost exclusively businesses. They do not serve residential customers in urban cities, and one of the reasons they do not is because of reciprocal compensation and the way it works.

They would be disadvantaged. Every time they retain or obtain a residential customer, instead of being able to collect reciprocal compensation from the ILECs or the telephone company, they end up having to pay it. They are discouraged. They are disincented on the urban residential customers, let alone going out to rural areas. That is a fundamental problem.

Now, in terms of how the rules, the asymmetric regulation, affect us, it is the typical set of having to live with and operate with a regulatory regime when you are competing with people like cable modem that have no regulation. We are regulated pervasively where they are not. So every decision we make has to be in light of that, that we stand at a competitive disadvantage, whether it be in terms of our prices, bundling, packaging, we talked about the 271 issue, their ability to leverage content, their ability to pick and choose what they want to put on, what access they want to give.

All of those things put us at a tremendous disadvantage, as does the fact we are going to pay, as I said, \$750 million or thereabouts in reciprocal compensation, moneys that could help us go from the 80 percent of our customers that we will serve with broadband to closer to 100 percent, to cover those rural areas.

We want to be there. We are the only company that has made that kind of commitment. But the asymmetric regulation has no place in a competitive market, and that is what we suffer from. There is no bottleneck. These people have the same options to get to the customer that the cable people do, that we do, that the wireless people do, and the satellite people. But yet we suffer from, and our customers and the public suffers from, asymmetric regulation.

Senator BROWNBAC. Senator Rockefeller.

**STATEMENT OF HON. JOHN D. ROCKEFELLER IV,
U.S. SENATOR FROM WEST VIRGINIA**

Senator ROCKEFELLER. Thank you, Mr. Chairman.

I always like to start out by pointing out that I never had a single constituent or got a single letter, a single e-mail, had a single conversation or a single phone call in which anybody asked me or anybody that I know around here to deregulate the telecommunications industry. So we did you an enormous favor. It was not asked for by our constituents. It was asked for by the telecommunications companies of America.

We did that and in return we extracted e-rate and some other things, which some people in here supported and others did not. But it passed overwhelmingly and it is probably the future of the nation.

That is why I also disagree with you, Mr. Haynes, when you differentiate between the FAA as being public safety and this kind of regulation. I think there is a big comparison between broadband distribution and public safety in the broader sense, i.e., everybody having a chance, knowing it. Otherwise I think this could become, the digital divide could become the next civil rights movement on a worldwide basis, with terrorism and all kinds of things involved. So I look upon it very differently than you do, obviously.

My question, Mr. Ellis, is to you. You want to—having come to us and having gotten a great deal, you want the Brownback bill, which I do not support because I think it would undo some of the checks that the RBOCs want so badly to undo now, having settled for them earlier. So there is discussion about regulation.

There are 37 co-sponsors to a bill that Olympia Snowe and I introduced which would give tax credits that would escalate as the broadband got more serious in its intensity for uploading and downloading for rural areas. SBC has not actually taken a position on this and it seems to me that tax credits are often a good way to motivate the private sector.

Is this a bill that—as I say, it is very bipartisan. It is very good, I think. It relates to rural areas. Is this something that SBC would find in any way helpful?

Mr. ELLIS. Senator, we applaud the intent of the bill. We have had our tax people look at that at some length and we have some concerns that the bill does not in its present form accomplish what I think is intended, namely to create incentives to assist in the deployment of broadband. I think we certainly are in favor of the goals and the objectives, and we will be providing some thoughts to your staff and others on the problems that we see in its present formulation.

But the idea is a good one. We applaud it.

Senator ROCKEFELLER. The idea is a good one, but you say it will not work.

Mr. ELLIS. I am not a tax expert, but I have been advised by our tax lawyers and the accounting people that the benefits are not delivered in the way I think was intended. That is, that the incentive, the whole purpose, does not work. The idea is a good one. We have got some ideas on how it perhaps could be improved.

Senator ROCKEFELLER. Could you share those ideas with us? Because it is not often that the federal government offers to help the

private sector do what needs to be done. You I believe said, or somebody I think said, that 80 percent of the country was getting broadband or would get broadband. That certainly does not apply where I come from. It is closer to 5 percent of the geography.

Mr. ELLIS. What our commitment is that, independent of this legislation or others, we have made the commitment that we will deploy broadband, high speed access to 80 percent of our customers by some time next year.

Senator BROWNBAC. Well, I congratulate you. I wish you were working in the East.

Thank you.

**STATEMENT OF HON. SLADE GORTON,
U.S. SENATOR FROM WASHINGTON**

Senator GORTON [presiding]. The Senate is in a roll call right now and Senator Brownback has left to go vote. Have either of you?

We will try to keep this continuous. I can tell my colleagues here, Skip Haynes is both a constituent and a friend. Skip, I think the problems that you face may be evidenced at least in small part by the fact that you are from such a rural area and from so far away they do not know how to spell the name of your company, even the staff here. It is "Rainier," after the mountain.

But I am going to let you add a little bit to the commentary that you make. You have done something that has not happened in most of the rural areas of the country. You are clearly a leader, perhaps in the top 1 percent. And yet what you are asking for here is to reverse some of the genius and the philosophy behind the 1996 Act and to restore a monopoly situation in broadband and perhaps even in telephony as well, directly or indirectly.

You have arrayed against you not only a number of rather large companies, but most of the intellectual opinion, the outside academic opinion in the country. Your testimony states very eloquently, why should you make an investment, the kind of investment that you have made, if you have got to give it away essentially at less than cost?

Is there not a cure for that complaint short of recreating a monopoly situation?

Mr. HAYNES. Senator Gorton, it is great to see you, and it is a reasonable question. But in my opinion, unfortunately, the regulators at the FCC and in Washington State have not been reasonable. It seems as though, while we should wear white hats as incumbents for having provided service as well as we have for as long as we have, that all of the advantages go to the "new entrants." I think if we did have reasonable cost procedures, reasonable prices that we could charge, that would improve the situation. But my experience has been that the regulators have not been reasonable with the incumbents, unfortunately.

Senator GORTON. And you are speaking of regulators at both levels?

Mr. HAYNES. Yes, Senator.

Senator GORTON. Can you differentiate between the State and the FCC at all?

Mr. HAYNES. It has been my experience that the FCC has been unfair and unreasonable in its treatment of incumbents and, if anything, in Washington State it has been worse.

Senator GORTON. Would any of the other of you, any of you who are on the other side of this issue, like to comment generally speaking on my question?

Mr. TAYLOR. Yes, Senator. I think a lot of the issues that revolve around rates, whether they are end user rates or contractual inter-carrier rates such as reciprocal compensation, have remedies out there today that do not need legislation. End user rates can be raised or lowered in most areas fairly easily today. Inter-carrier compensation, reciprocal compensation, are simply rates that are set by the Bell operating companies and dictated to the CLECs. The CLECs have in the past focused on getting those down lower and we have been successful.

I think it is also interesting to note, where I live outside of the Chicago area I get both my phone service and my cable service from SBC and, interestingly enough, if cable is so well unregulated, it is surprising that SBC will not offer me high speed access on my cable system.

But more importantly, though, I think as we look at this, the Ninth Circuit has already decided that cable modem service is a common carrier service. So we are beginning to make sure that the inequities get fixed on the regulatory side, and I think all of the companies here have the pricing flexibility to make sure that that \$15 phone line that Mr. Ellis' daughter uses might be priced at \$20 appropriately, or that the reciprocal compensation rates that SBC set at a penny might be appropriately priced at a tenth of a cent. Those can be done today without any changes from the Committee.

Senator GORTON. Mr. Ellis.

Mr. ELLIS. Senator, it has taken Southwestern Bell Telephone Company 110 years to get the basic telephone rate in Texas to \$9.85. I believe it was 1979 or 1980 since the last rate increase on basic telephone services in Texas, and then it was like 25 cents.

I would like to take a little bit of issue, if I may, with the idea that we are seeking to reverse the Telecom Act. At the heart of the Telecom Act in 1996 was a concept that the local company had a monopoly and had a bottleneck control over the provision of basic telephone service, particularly to residential customers. That was at the heart of it. We got it legally. It was there because of public policy for 100 years.

What we are talking about here is something where we do not have that bottleneck. In 1996, DSL was in the thoughts and minds of people. So was cable modem. New service. There are alternatives out there. There is no bottleneck. All we are asking is, given that there is no bottleneck, given that we are behind our competitors in the provision of advanced services—as I said, four or five customers to one go to our competitors—given those facts, all we are asking is for advanced services to be treated like our competitors are, not to be burdened.

If we have that option, I am here to tell you it will assist in the deployment to the rural areas, the other 20 percent that my company is not reaching. But there is a fundamental difference in voice

communications, where we at one time had a bottleneck, and advanced services where there is no bottleneck.

Senator GORTON. My time is up. Senator Dorgan, I will leave it with you and I think Senator Brownback will be back by the time you have finished.

Senator DORGAN. Well, if I am left alone I may pass some good legislation here.

[Laughter.]

Senator GORTON. All by unanimous consent.

**STATEMENT OF HON. BYRON L. DORGAN,
U.S. SENATOR FROM NORTH DAKOTA**

Senator DORGAN [presiding]. It is a rare occurrence.

I probably only have a minute as well. I think the vote is nearly over. But I have been over in the Energy Committee this morning and regret that I have missed some of the testimony.

I do want to just make a couple of comments, however. This hearing I think is important and useful. Monopolies are a kind of cholesterol to the free market system. They plug the arteries of the system. When we passed the Telecom Act, we attempted to unleash the forces of competition in this area. I regret it has not worked as well as I would have liked. There is far more concentration than I would have liked.

But I also see evidence that the act is beginning to work—new entrants, aggressive, robust competitors coming in, new investment money for startup companies. I think all of that is beginning to work. And I want to let it work. I frankly do not support S. 2902. I think it does short-circuit what we intended to accomplish in the Telecom Act.

I must also say that selling this approach on the basis of its benefits to rural areas is not accurate. I would say in North Dakota, for example, U.S. West is selling off most of its rural exchanges and it has been doing that for the last 4 or 5 years, trying to sell all these local exchanges. So I do not think that it can be documented that this somehow would be good for rural areas.

I have introduced legislation called the Broadband REA Program, essentially saying that I do not think the buildout of the infrastructure of advanced services is going to occur unless we do something like we did with electricity or telephone service to rural areas of the country. I support some tax incentives. Perhaps that works. I support something similar to the old REA program with revolving loans. Perhaps that works.

But I do not think that at this moment it makes sense for us to unravel portions of the Telecom Act, and for that reason I do not support S. 2902. I think this hearing is useful, however, to give an airing to these issues. While I have got to be on the floor of the Senate for the next hour, I will try to get a transcript, and I have read the testimony that you have presented.

As you can tell from the initial discussions, this is going to be a robust, healthy debate for some while to come. It was our intention when we passed this Act to create a checklist by which the local exchange carriers could go out and compete in long distance, provided they meet certain things. Now, SBC has met that in Texas, as I understand it. It is not our intention to establish this

as a barrier. We want the Federal Communications Commission, the state authorities, to work with the local exchange carriers. If they meet the checklist—and they ought to be able to meet it; we are not creating barriers here, we are trying to create opportunities—then we unleash the forces of competition.

But I tell you, I have heard all over this country from people who are new competitors that there are subtle and some not so subtle ways for local incumbents to prevent effective competition. That is the nature of things. That is the nature. It is the way things work. I understand all that.

But I think to pass S. 2902 really would begin unraveling forces in the Telecom Act that I begin to see working now in a way that I think can be exciting, yes, even for rural areas of the country.

I regret I cannot spend more time. I would love to ask a series of questions, but because of the floor vote I have to leave. Mr. Chairman, thank you.

Senator BROWNBACK [presiding]. Thank you, Senator. If you would like to submit some of those questions for the record, we would be happy to have those as well. Senator Breaux.

**STATEMENT OF HON. JOHN B. BREAUX,
U.S. SENATOR FROM LOUISIANA**

Senator BREAUX. Thank you very much, Mr. Chairman. Thank you for having the hearing. It gives us an opportunity to discuss a lot of the issues that have been bubbling up for a long period of time.

I apologize to the panel for being in and out and having to testify before the Agriculture Committee and then having to vote. It shows you how things work or do not work around here, coming in and out.

But I would like to talk a little bit about the reciprocal compensation issue. Mr. Ellis, my staff tells me you addressed this. I am sorry that I missed it. Can you give me some dialog a little bit, Mr. Ellis? Perhaps you have already done this, but how did it work before the Internet, the concept of reciprocal compensation? It kind of was a wash before we got into the new transition. We never had real strong rules with regard to payment for the use of other lines before the Internet came into being. How did it work back in the dark ages?

Mr. ELLIS. The concept was in the legislation simply to compensate a carrier for terminating a call if they were not otherwise compensated, and that call had to be, local calls. We had other things for long distance, but if it was a local call and the carrier was not compensated otherwise.

What we have instead is the reciprocal compensation being paid for calls that, number one, are not local. These go to the World Wide Web. They are not reciprocal. You never get a call back from an Internet service provider at all. And they bear no relationship to the cost of completing that call. In fact, if you think about it, when a customer makes a call to the Internet and it goes to, let us say, ICG, ICG has a relationship with its ISP and that ISP pays ICG for one thing, to terminate the call that we pass off.

Under the present rules as they are being applied, not only do they collect from their Internet service provider for that one way,

because nobody originates—the Internet Service Provider does not originate a call. So not only does ICG collect from the Internet Service Provider, but they also collect from the telephone company, and they collect in a manner and in an amount that is totally disproportionate to the cost.

We have specifically asked ICG and others, what costs, submit cost studies that show what your costs that justify these exorbitant rates for reciprocal compensation. I know in three jurisdictions they have not submitted it and to my knowledge not a single data CLEC has submitted the costs for completing a call to justify what we believe is an unjustified and unsustainable amount.

Senator BREAU. Mr. Bryan, why has that not been done?

Mr. BRYAN. We have submitted costs to SBC. Maybe you are not current with what is going on between the two companies. But it is—as I said in my earlier testimony, there are actual costs that we incur before we carry one moment of traffic on it. We have to deploy switches that cost us about \$10 million. We have to get an interconnection or trunking that, if we lease it from SBC, we obviously have to pay them. We then have to connect with the ISPs and then we have to go and see if we can market those services to the ISPs.

The reason that we have been successful—so there are substantial costs associated with this.

Senator BREAU. Do you think nothing should be done with regard to this issue?

Mr. BRYAN. I think that, as Mr. Ellis probably knows, the marketplace is sorting this out. In fact, with his company we are being paid probably 15 percent of what we were being paid 2 years ago. So the rates have come down sharply and it is envisioned will continue to come down sharply.

It is hard to imagine that any companies should deploy equipment and save, in this case, SBC capital they would otherwise have to pay. But there is a point here. We got in this business because the market, the ISP market, was not being well served by the various incumbents. We came in, we priced it maybe slightly below the Bellco prices. But we got it because we offered them service that the Bell companies did not want.

Senator BREAU. I understand that. I am just worried about the compensation methodology that is being used.

Mr. Ellis, did you make a recommendation on what you think we should do? Should this be something—I know Senator Lott and I have contacted the FCC with regard to some of their authority in this area to see what they might do about this. But what do you think? Is the marketplace going to take care of this? Do we need legislation? Do we just need to ask the FCC to make a decision on how these imbalances can be fixed or should be fixed? What is the solution?

Mr. ELLIS. We support this legislation. But I would just say, I think the industry as a whole agrees there ought to be one policy, not left to individual States. There ought to be one approach to it. That has not happened. The FCC has had it for a long, long, long time, and there has not been a rationalization of the reciprocal comp rules.

Senator BREAU. What happens if we do not do anything legislatively? Then do you have 49, 50 different set-ups?

Mr. ELLIS. We all have different set-ups in all our jurisdictions. For instance, in Texas the rates have fallen significantly. I gave an example, at one time it was \$450, we collected 15. That number is down around, somewhere around \$100 versus the 15. In Illinois it is closer to \$200. So in all our jurisdictions there are different numbers.

But there is still a significant problem that cries out for a rational resolution.

Senator BREAU. So you are satisfied with that part? I mean, the whole bill that Senator Brownback has offered, but with regard to the reciprocal compensation issue?

Mr. ELLIS. Absolutely.

Senator BREAU. Mr. Bryan, you disagree with that?

Mr. BRYAN. I disagree because it results that we deploy capital that the Bellcos would otherwise have to deploy and we just do not get compensated for it. There is an easy way for SBC to solve their reciprocal compensation dilemmas if they are concerned about it. It is the old-fashioned way: Go build a network, put us out of business.

Senator BREAU. Mr. Ellis.

Mr. ELLIS. Well, they do get compensated. I just gave an example.

There is no reciprocal in this concept. There is no reciprocal traffic from the Internet service providers. Their sole purpose when they connect with ICG is to receive calls that ICG terminates, and ICG gets compensated for that plant, no question about it. When they collocate, as they do with the Internet service provider, and they simply hand the call to the Internet service provider, the Internet service provider is paying them. When they pay them, it is for one thing: to receive calls from them. They never pay them to originate. There is no reciprocal here. They are getting compensated.

Mr. BRYAN. May I just add one thing to that? Of course there is reciprocity, because from inception we have used SBC's network and we have paid them for it. There is no question, we have always paid you on time for the use of your network. In this transaction—and in most transactions we had to pay you much more than you pay us. In these issues, you have to pay us more and I know that is offensive to you.

But there is an issue here. SBC has a customer. That customer has come and wants access to the Internet. They have decided, because we have come in now and said to the ISPs, we will provide you with network. We are now in the middle of that. We did not need to be in the middle of that if they had provided the same service to the ISPs. Well, they can start that tomorrow. We will be put out of the marketplace.

But we are providing a service. If we were not providing the service, then you could have deep concerns that your customers might switch over to the cable companies that are frightening to you.

Senator BREAU. Ain't competition great. Well, Mr. Ellis, I happen to agree. I think that you have made some good points on the

issue. I just do not think it is a level playing field at all and I think something needs to be done about that.

Thank you.

Senator BROWNBACK. Mr. Bryan, let me ask you something on the specific legislation. In your prepared testimony you asserted that my legislation would deny the CLECs the ability to interconnect with ILECs networks. Where in my legislation is the interconnection requirement of section 251[a] eliminated for the ILECs? Rather than eliminate the ability to interconnect with the ILEC networks, does the bill not simply put the interconnection terms on the same level as interconnection with any other carrier and apply the same resale rules, contrary to your testimony? My bill really does not deprive you of selling an ILECs broadband service, but puts it on the same regulatory level as the resale of any other carrier's services.

If I am a carrier, why should it cost me less to interconnect with SBC than it costs me to interconnect with ICG, or less to resell ICG's services than ICG's?

Mr. BRYAN. Well, Mr. Ellis and I agree on one point, that this country's telecom is vital because we can use other people's networks. No one is going to have a comprehensive network. We have to use other people's networks.

It is I think better if we can now, if SBC develops a new technology, if we can then avail ourselves of that new technology and lease that capacity from them. We are happy to reciprocate that and have them use our network. Wherever we have network deployed, if there is a site where SBC wishes to use our network, we will work out an arrangement where they can then take our network and use it.

But to be foreclosed from taking over and unbundling those elements, the very elements that are going to be the advanced and exciting elements, I think not only is it going to be bad for the competitive telephone companies, it is going to be bad for the creative element, because the most creative people in this industry are those who are thinking about new ways to take advantage of advanced networks.

So my view is those networks need to be made open and available to creative—let us now go back to how this country was when each State would charge taxes. Before you could go from Delaware to Pennsylvania, you had to pay a tax. Let us have it be open and let us let networks be used. We should both be compensated for the use of the network, but we should not be able to create little feudal systems that blank it out.

Senator BROWNBACK. Mr. Ellis.

Mr. ELLIS. This goes back to one of my starting point principles that SBC evaluates legislation. In competitive markets, the government should not regulate rates, terms, or conditions. The advanced services, to distinguish it from the voice side of the business, advanced services is a competitive market. As I have said, we do not have a bottleneck. We have absolutely no bottleneck.

There is no regulation on the other set of wires that go into every house or virtually every house. That is, the cable and cable modem services are completely unregulated. They have no interconnection obligation, no unbundling, and so forth. My basic principle is that,

given the existence of alternatives to our DSL services, we should not be treated any differently than those alternatives.

I believe in, as I gave the example of the wireless industry developing without regulation, on normal commercial transactions there would be the interconnection of networks. There would be normal business relations. But I submit, where there is no bottleneck and where cable modem has the exact same set of wires going into the house and they are treated one way, that there is no justification to treat the telephone DSL services in another way.

Senator BROWNBACK. Mr. Taylor.

Mr. TAYLOR. I certainly sympathize with Mr. Ellis' position on that. But the great thing there is the Ninth Circuit and the FCC are going to regulate cable modems as a common carrier service. So that other wire into the house will be treated like the wire that is into the house today, so that we are solving that problem through the regulation of the cable modem, and the Ninth Circuit Court of Appeals decided that cable modem service was a common carrier service.

Senator BROWNBACK. Let me wrap up with one question that I have looking at this overall issue of how we get this deployed to rural areas, which is what the whole focus of the bill is about, is how do we get this out to rural areas. You are not there right now. You cite several companies that are, but the percentages are very low. Bob and Nancy Brownback on the farm in Parker, Kansas, and my brother Jim, they are just not having the access that other places do.

That is what we are aimed at and that is what we are trying to create. Now, some people say let us create tax incentives, other people say let us put subsidies. We are going to do something to try to create a level field here for rural America so that they can have the same access to the same economic needs, and clearly we have those.

I would hope that all of you on the panel would work with us to see the answer to that issue on through. I look at it and I see a clear opportunity to level the regulatory playing field here and create a system where they will reach out. In other words, even by leveling the regulatory playing field, we even put requirements on those people. If they want to have the level regulatory field, they have to build out, 100 percent buildout. So we do not even give just regulatory parity. We say to get regulatory parity you have to do something, and that is to invest in areas where CLECs and your companies have to date been unwilling to do so. They have not been willing to go out into those areas.

Now, if you were to sit here today and to promise me that within a year or two the CLECs are going to be out there, 100 percent competitive like the bill is requiring of the ILECs to do, I will be much more interested in what you are saying, rather than just—it seems like more of a protective interest in how do we address these rural needs. That is what the focus is.

Mr. TAYLOR. If I could comment, I think that there are a lot of companies—and I cited McLeod USA, which is building out all over what I would describe as rural America. The underlying challenge, though, is it is not a technology, it is not a regulatory challenge. It is an enforcement challenge. Getting into incumbent central of-

fices to deploy DSL technology takes a long time. If we could get faster access to the facilities necessary to deploy broadband, it can happen faster.

But even then, it is a people and equipment challenge. Companies like Focal, companies like ICG, quite frankly I can imagine companies like SBC, are deploying technology as fast as humanly possible. If you opened up every door and took away every regulation, I am not sure that manufacturers could make and companies could install the equipment any faster than it is today.

Senator BROWNBAC. But they are able to do it in the urban areas now and you are able to get in there, but you are not in the rural.

Mr. TAYLOR. There are DSL services in rural Iowa, in rural Illinois.

Senator BROWNBAC. Less than 5 percent.

Mr. TAYLOR. It is less than 5 percent in Chicago have DSL services.

Senator BROWNBAC. I mean, I'll just go through the numbers with you again, but you are up to 73 percent in the urban-suburban areas, where the market is good.

Mr. TAYLOR. But they do not have DSL service. They have the potential.

Senator BROWNBAC. Cable modem and/or DSL.

Mr. TAYLOR. And cable modems—I mean, cable. I have SBC cable service. They will not offer me a cable modem.

So it is a choice, but the market is addressing it and moving as quickly as they can. I think the example at Rainier, they are deploying numerous different technologies and obviously being successful at it. I think that it will happen. It is a matter of time and enforcement of the current rules.

Senator BROWNBAC. How much time?

Mr. TAYLOR. I cannot answer that because it still takes a technician to climb up a telephone pole and you still put in a piece of fiber optic cable.

Senator BROWNBAC. How much time before, under the current system, the CLECs will get these advanced services deployed in rural areas to the 80 percent level, Mr. Bryan or Mr. Taylor?

Mr. BRYAN. This is almost a bad and good answer to your question. It is unknowable. The only hope I can give you is this whole competition and the evolution of the Internet has resulted in creative solutions.

Senator BROWNBAC. In 5 years will you be 80 percent?

Mr. BRYAN. Let me just give you one little tidbit and then you will see why I am having trouble giving you a time-date. In the last 6 months we have seen the cost of the soft switch ports—these are not the traditional circuit switches, but the switches that Mr. Ellis and all of us are going to deploy starting next year—coming down sharply. We have also seen the capacity of these pieces of equipment going up.

None of us could have predicted 6 months ago it was going to happen this way. So I think you are going to find that, with some somewhat traditional network deployed, by adding now new technology we are going to be able to make these old circuits that SBC has going into Farmer Brown's location much more robust in a rel-

atively short time period. I am not a technician, but the one thing I would——

Senator BROWNBACK. If I could, Mr. Bryan, and I appreciate your answer because you do not feel like you can answer me. But in the legislation we put an answer in there. If the CLECs want this, they have got to do this within a date certain. That is what I am asking, and you are giving me no certainty.

Mr. Haynes, let us wrap this round up, and if Mr. Breaux wants any more questions we will give him another shot at it.

Mr. HAYNES. Senator Brownback, I think one of the beauties of this legislation proposed is it will increase the demand for broadband services across the country. I will guarantee you when our customers come in and start asking for services and say they are valuable and they are willing to pay a reasonable cost, we find ways to do it.

We pass 3 to 4,000 homes with cable. We have 1,000 cable subscribers. We have 57 with cable modems. The way our company is going to be more successful with cable modems and DSL is when they are reading the advantages in the Tacoma newspaper, where we do not serve, the Seattle newspaper, when they are seeing the Seattle stations bragging about the value.

Furthermore, when the ISP providers complete the rest of the chain, so when you finally get something that works fast at home it does not get bogged down somewhere else in the network. It is very, very frustrating to have a cable modem sitting on my desk in my office, DSL in my home, and I get very slow speeds at certain locations at certain times of the day.

So in my opinion, the beauty of your bill, bringing high speed data in the major metropolitan areas to 80 percent of the people increases the demand and gives us a better market to bring those services in rural America. I think it is a much bigger pie and that is where it is going to help small companies like ours to help serve our customers.

Senator BROWNBACK. Senator Breaux, do you have any followup questions?

[No response.]

Senator BROWNBACK. Mr. Ellis, and we will wrap this panel up.

Mr. ELLIS. Senator, if I may, one of the attractive features from our perspective of your bill is the discontinuance of the reciprocal compensation. As I said, at both ends of the table we have companies that do not even serve the residential customers in the urban communities, let alone out in the rural. Why? I submit that the reciprocal compensation system disincentivizes them from doing that. Every time they serve a residential customer instead of their ISP, every single time, they risk paying the exorbitant reciprocal compensation that we are paying. They are disincented.

In terms of demand for advanced services, it is there. Every single day my company will sell between 3,000 and 5,000 DSL lines, every single day. Where it is available, we cannot keep up. We cannot install as fast as we can sell. It would be the same or even more in the rural areas.

Mr. TAYLOR. If I could just add for the record, Focal is providing and in the process of building out to 300,000 homes in rural northern California in Contra Costa County. We have tens of thousands

of residential customers up in service today, and there are lots of residential customers being served by CLECs. We serve thousands of residential customers in the city of Chicago, and SBC has known that.

Mr. BRYAN. May I just add one thing for the record. The same thing for ICG. I would also add that while we are waiting for broadband services to the rural area, I think it would be a crime to cutoff their current lifeline, which is dial-up access to the Internet. People in the rural areas are getting that service to the Internet and to now place higher charges on that service I think will do your rural concerns great damage.

Senator BROWNBACK. Well, thank you all. Competition is great. I hope you all will help me get my folks served with this, because one way or the other, whether it is tax policy, subsidy, or regulatory relief, we need to act. I think the clear best route to go is on regulatory relief. I think it makes the most sense and it is the fairest way to go.

I thank all the panel members for being here today. The record will remain open if you would like to submit other statements to be included in the record.

We next go to the second panel. That consists of: Ms. Sue Ashdown, Co-owner, Xmission, of Salt Lake City, Utah; Mr. Tom Dueterberg, President and CEO of Manufacturers Alliance; Mr. James Glassman, Resident Fellow, American Enterprise Institute; Mr. Peter Pitsch, the Communications Policy Director for Information Technology Industry Council; and Mr. Eric Struminger, the Managing Director of Paine Webber.

Ms. Ashdown, let us proceed with you first on the panel. We look forward to your statement. Could I ask you to keep your statement to about 5 minutes so we can have as much time as possible for questions. I would appreciate that. The floor is yours. Welcome.

**STATEMENT OF SUE ASHDOWN, CO-OWNER, XMISSION, AND
EXECUTIVE DIRECTOR, AMERICAN INTERNET SERVICE
PROVIDERS ASSOCIATION**

Ms. ASHDOWN. Sure. Thank you. Thank you for inviting me, Mr. Chairman and Members of the Committee. I am Sue Ashdown. I am a Co-owner of Xmission, an independent Internet service provider based in Utah. Xmission was founded in 1993 as the first Internet service provider in Utah, which has plenty of rural areas that it serves. I am also the Executive Director of the American Internet Service Providers Association.

So I am very grateful to have the opportunity to testify on S. 2902, the Broadband Internet Regulatory Relief Act, because Internet service providers have been mentioned many times already this morning and I think that it is important for this group of Senators to remember that when we are talking about Internet access in rural areas, it is predominantly provided by the independent Internet service provider. We are not talking about AOL or Earthlink that are out there providing that access, but it is the small independent local Internet service provider providing that rural access, and we are very concerned about this legislation because we are concerned about the aspects, the way that it would control our ac-

cess to phone company services that we need to be able to provide our service.

We are excited about the opportunities that broadband Internet access services provide to our customers and as fast as we can get high speed digital subscriber line transport services we are rolling out broadband Internet services to our customers. But we are experiencing a number of disappointing obstacles in our efforts to bring competitive broadband Internet access to consumers.

Foremost among those obstacles are the ongoing efforts of the incumbent local exchange carriers, and particularly in my territory U.S. West, favoring their affiliated Internet service provider in the provision of DSL services. In fact, the Utah Coalition recently filed a petition with the Federal Communications Commission asking for an investigation of U.S. West's practices that favor its affiliate, wholly owned ISP subsidiary to the detriment of independent Internet service providers.

These are practices that are prohibited by FCC rules. They include practices such as the joint marketing of a bundled package of local, wireless, and Internet access services that result in Internet access service being provided at prices well below what that service costs independent competitors to provide.

In the market today, incumbent monopoly carriers are ignoring their common carrier obligations and dragging their feet on opening their networks to competition as the law requires. So as a result, we Internet service providers find it hard to believe that Congress would consider amending the law to reduce or eliminate entirely those legal requirements for the very broadband services consumers are demanding. But that is precisely what Senate bill 2902 proposes to do.

Xmission and the American Internet Service Providers Association oppose this bill because it would make it even more difficult, if not impossible, for independent Internet service providers to provide high speed Internet access. Senate Bill 2902 undermines competitive ISPs in three ways.

First, the bill would exempt all incumbent carriers from any common carrier regulation by the FCC or the States for the provision of advanced services, which are defined as packet-switched services that deliver 200 kilobits per second in both directions. This definition includes DSL service, which means that U.S. West and the other incumbents would no longer be in violation of the law when they discriminate in favor of their own affiliate or refuse to provide nondiscriminatory access to broadband transport services for independent ISPs.

I might add right here that that was at the heart of our request to the FCC to investigate the discriminatory provisioning that was going on with the Internet service providers in Utah.

In a perverse twist, if this bill were enacted, competitive carriers would continue to be required to provide nondiscriminatory access to transport service for Internet service providers under the FCC's rules, but the monopoly incumbent carriers would be free of this burden. It is this rule, enacted as part of the FCC's Computer two proceedings, that is one of the basic principles that ensures that we have a competitive Internet today.

Second, in a competitive market ISPs might be able to turn to other carriers in order to offer service to consumers, and we certainly do that today whenever a competitive alternative presents itself. For example, two reasons many Internet service providers prefer competitive carriers are that they will sell us collocation space for our equipment at a central point and they will let us buy local calling numbers so that our customers avoid paying in-state long distance charges for Internet access. The incumbents have always had the ability to sell us these services, but many still choose not to do that today.

Unfortunately, there are unlikely to be many competitors to choose from if this bill is ultimately enacted. This is the case because Senate Bill 2902 exempts various formulations of packet-based, packet-switched, and advanced services, as well as the new fiber optic facilities, from the pro-competitive requirements of section 251[c] of the Communications Act. Competitive carriers, some of whom are testifying before you today, depend on being able to collocate their DSLAMs, get their access to unbundled network elements, and obtain cost-based interconnection with the incumbent carrier's network in order to provide DSL services independent ISPs need.

Under this bill, competitors would have to duplicate much of the monopoly network before they could offer any DSL services to ISPs, and the cost of this unnecessary duplication would be astronomical. The present rollout of DSL will screech to a halt and competitive broadband will come only to the most densely concentrated business markets, and I do not think that was the intent behind your legislation.

Finally, if the other two changes I mentioned were not enough to ensure competition does not continue to grow, this bill would prohibit the payment of reciprocal compensation for Internet-bound traffic. I am sure we heard already from many of the competitive carriers about this, but let me address it for a moment from the ISP point of view if I have your indulgence.

Senator BROWNBACK. In 1 minute here, please, because we have got a big panel.

Ms. ASHDOWN. Right. Reciprocal compensation occurs when the local carrier whose customer originates a call hands that call off to a second local carrier for delivery to the second carrier's customer. Wireless carriers pay incumbent carriers for completing wireless calls to customers on the incumbent's network and it is no different when the call goes from an incumbent carrier's customer to an ISP served by a competitor. These are costs for which the competitor should be compensated.

If Congress removes the reciprocal compensation obligation, then competitors must either recover their costs from the ISP or stop serving ISPs, and neither result is good from a policy or a consumer point of view. If they have to turn to the ISPs to recover their costs, just as an example, based on the average cost for local traffic of $\frac{2}{10}$ of a cent per minute—

Senator BROWNBACK. If you could wrap it on up, Ms. Ashdown.

Ms. ASHDOWN.—competitors would have to charge Internet service providers an average of six dollars per month to cover their costs. The Internet market is fiercely competitive right now. We are

not in the position to be able to charge, to pass those costs on to our customers. They come out of our bottom line. They hurt our ability to serve rural Americans as well as urban Americans, and I hope that the Committee will not support this bill.

[The prepared statement of Ms. Ashdown follows:]

PREPARED STATEMENT OF SUE ASHDOWN, CO-OWNER, XMISSION, AND EXECUTIVE
DIRECTOR, AMERICAN INTERNET SERVICE PROVIDERS ASSOCIATION

Mr. Chairman and Members of the Committee, I am Sue Ashdown, a co-owner of XMission, an independent Internet Service Provider (ISP). I am also the executive director of the American Internet Service Providers Association. Thank you for inviting me to testify on S. 2902, the Broadband Internet Regulatory Relief Act of 2000.

XMission was founded in 1993 as the first ISP in Utah. The American Internet Service Providers Association represents independent ISPs serving both urban and rural consumers. Independent ISPs are excited about the opportunities that broadband Internet access services can provide to our customers. As fast as we can get access to high-speed Digital Subscriber Line (DSL) transport services, we are rolling out broadband Internet services to our customers.

However, we are experiencing a number of disappointing obstacles in our efforts to bring competitive broadband Internet access to consumers. Foremost among those obstacles is the ongoing efforts of the incumbent local exchange carriers, and in particular U.S. West, to favor their affiliated ISP in the provision of DSL services.

In fact, the American Internet Service Providers Association recently filed a petition with the Federal Communications Commission asking for an investigation of U.S. West's practices that favor its affiliated, wholly owned ISP subsidiary to the detriment of independent ISPs. These practices are prohibited by the FCC's rules. They include practices such as the joint marketing of a bundled package of local, wireless, and Internet access services that result in the Internet access service being provided at prices well below what that service costs independent competitors to provide.

In the market today incumbent, monopoly carriers are ignoring their common carrier obligations and dragging their feet on opening their networks to competition as the law requires. As a result, ISPs find it hard to believe that Congress would consider amending the law to reduce or eliminate entirely those legal requirements for the very broadband services consumers are demanding.

Yet that is precisely what S. 2902 proposes to do. XMission and the American Internet Service Providers Association oppose this bill because it would make it even more difficult, if not impossible, for independent ISPs to offer high-speed Internet services. S. 2902 undermines competitive ISPs in three ways.

First, the bill would exempt all incumbent carriers from any common carrier regulation by the FCC or the States for their provision of "advanced services," which are defined as packet-switched services that deliver 200 kilobits per second in both directions. This definition includes DSL service, which means that U.S. West and other incumbents would no longer be in violation of the law when they discriminate in favor of their own affiliate or refuse to provide non-discriminatory access to broadband transport services for independent ISPs.

In a perverse twist, if this bill were enacted competitive carriers would continue to be required to provide non-discriminatory access to transport services for ISPs under the FCC's rules, but the monopoly incumbent carriers would be free of this burden. It is this rule, enacted as part of the FCC's *Computer II* proceedings, that is one of the basic principles that ensures we continue to have a competitive Internet today.

Second, in a competitive market ISPs might be able to turn to other carriers in order to offer service to consumers. We certainly do today whenever a competitive alternative presents itself. For example, two reasons many ISPs prefer competitive carriers are that they will sell us collocation space for our equipment at a single central point and will let us buy local calling numbers so that our customers avoid paying instate long distance charges for Internet access. The incumbents have always had the ability to offer us these services, but many still choose not to today. Unfortunately, there are unlikely to be many competitors to choose from if this bill is ultimately enacted.

This is the case because S. 2902 exempts various formulations of packet-based, packet-switched, and advanced services, as well as new fiber optic facilities, from the pro-competitive requirements of section 251(c) of the Communications Act. Competitive carriers, some of whom are testifying before you today, depend on being able

to collocate their DSLAMs, get access to UNEs, and obtain cost-based interconnection with the incumbent carrier's network in order to provide the DSL services independent ISPs need.

Under S. 2902, competitors would have to duplicate much of the existing, monopoly network before they could offer any DSL services to ISPs. The costs of this unnecessary duplication would be astronomical. The present rollout of DSL will screech to a halt, and competitive broadband will come only to the most densely concentrated business markets.

Finally, if the other two changes I mentioned were not enough to ensure competition doesn't continue to grow, this bill would prohibit the payment of reciprocal compensation for Internet bound traffic. I am sure that the competitive carriers represented here will address this issue in detail, but let me add the ISP point of view.

Reciprocal compensation occurs when the local carrier whose customer originates a call hands that call off to a second local carrier for delivery to the second carrier's customer. Wireless carriers pay incumbent carriers for competing wireless calls to customers on the incumbent's network, and it is no different when the call goes from an incumbent carrier's customer to an ISP served by a competitor. There are costs associated with delivering the call for which the competitor should be compensated.

If Congress removes the reciprocal compensation obligation, then competitors must either recover their costs from the ISP or stop serving the ISPs. Neither result is good from the policy or consumer point of view. If competitors stop serving ISPs we lose the choice of services they offer and our customers lose the reduced prices that competition brings.

If competitors turn to ISPs to recover their costs, then ISPs must pass that cost on to consumers. Based on an average cost for local traffic of two-tenths of a cent per minute (as found by the Louisiana public service commission), and an average Internet use time for a rural user of 53 hours a month, competitors would have to charge an ISP an average of \$6.00 per customer per month to recover their costs.

This would represent a roughly 25 percent increase in dial-up Internet rates—an increase that the incumbent would not have to impose on calls it carries to its own affiliated ISP, since the incumbent bills the caller and keeps all the revenue. As a practical matter, with the incumbents favoring their ISP affiliate and almost giving away Internet access as part of a bundled package of services, it will be nearly impossible for an independent ISP to pass on an increase in costs to our consumers.

In summary, this bill will stop broadband competition in its tracks. By freeing the monopoly incumbent carriers from any common carrier oversight, it ensures that they will favor their own affiliated ISP. The exemption of packet-switched services from the market-opening requirements of the Telecommunications Act ensures that competitors will not be able to cost-effectively serve anywhere other than the most densely populated markets. Lastly, by depriving competitors of reciprocal compensation for their legitimate costs of carrying dial-up ISP traffic, the bill removes an existing, narrow band revenue stream that competitors might use to finance their own broadband deployment.

I hope that the Committee will not support this bill, and will instead encourage the FCC and the States to aggressively enforce the existing rules that require incumbent carriers to open their local networks to competition and provide non-discriminatory broadband transport services to ISPs.

Senator BROWNBACK. I can see we disagree on this topic. I hope we can have a discussion about how we do get things out to rural areas. Mr. Duesterberg.

**STATEMENT OF THOMAS J. DUESTERBERG, Ph.D., PRESIDENT
AND CHIEF EXECUTIVE OFFICER, MANUFACTURERS
ALLIANCE/MAPI INC.**

Dr. DUESTERBERG. Thank you, Mr. Chairman, and thank you for this opportunity to appear on behalf of the Manufacturers Alliance. The Alliance represents over 400 companies across a broad spectrum of industries from aerospace and pharmaceuticals to telecommunications, oil and gas, and others.

I want to talk about your bill, which we support, in a broader context. This bill is important to manufacturers and related services. The American economy, including the manufacturing sector, is enjoying one of the most sustained periods of robust growth in its

history and has regained the international advantage that many thought was lost about 10 or 15 years ago.

One reason for this strong performance is the advent of what is variously called the digital economy, the information economy, or the Internet economy. Whatever the proper name, the phenomenon of ever more connected and powerful information processing is at its core. It is both the explosive growth of connected computing and its systemwide efficiency effects which are contributing powerfully to the low inflation, above trend line growth we have experienced from at least 1995 through this year.

The Internet and its predecessors have already revolutionized the financial sector and are now increasingly changing the manufacturing and retail sectors as well. The Alliance recently held a conference on business to business electronic commerce attended by nearly 150 companies. We learned that B2B sales are expected to grow from today's \$400 billion annually to nearly \$2.7 trillion or 17 percent of total sales by the year 2004. About 56 percent of U.S. companies are conducting B2B sales over the Internet now and over 90 percent anticipate doing so as soon as 2002.

The advent of Internet-based communications and transactions is also adding to the efficiencies of manufacturing in numerous ways. Auctions, better management practices, remote training, improved customer services, improved supply chain management and purchasing are among these.

The application of these new information technology and Internet-related processes in the manufacturing sector is one reason that this sector has performed well in an increasingly competitive global environment. Productivity in the manufacturing sector has grown by an average of 6.1 percent for the 3 years ending in March 2000, substantially higher than any 3-year period since 1950. Such sustained productivity growth in turn has helped keep a lid on inflation.

Although one cannot attribute all gains in productivity to a single factor since other technological breakthroughs, management improvements, and more efficient financing tools, et cetera, are also contributing to this, data from a recent study conducted by the Federal Reserve Board indicates that up to 40 percent of the recent upswing in trend productivity growth is accounted for by increases in the stock of information technology.

Broadband telecommunications is playing an increasingly pivotal role in the advance of the digital economy. As both manufacturers and retailers move increasingly toward electronic commerce and the use of the Internet as a management tool, the need for ubiquitous high speed connections grows even more crucial. High speed connections are needed not only to play video games and communicate with one's neighbors, but to do video conferencing, exchange design data on the thousands of parts that go into an automobile or an airliner, conduct auctions for raw materials, coordinate just in time delivery systems, facilitate distance learning, promote telecommuting.

If we are to achieve the projected gains from B2B e-commerce in the next few years, we will require high speed connections not only in the urban environments where high speed connections are becoming more available, but also in remote areas where many of

America's factories are now located and where numerous American small businesses and American telecommuters would like to be.

Powering the digital economy and maintaining the pace of productivity enhancement responsible for this growth path will require more rapid deployment of broadband networks in both urban and rural environments. There appear to be few technical and economic barriers to the deployment of broadband networks. In fact, there are numerous technologies which are now being tested and deployed for current use and there is a reasonable potential to have a competitive market for broadband services.

Many of the barriers to rapid near-term deployment of broadband services reside in the current regulation of the telecommunications sector. We believe that broadband services will be provided not only by the wireline providers that have been represented on the previous panel, but also by wireless providers, terrestrial and satellite-based providers, possibly even electric power distribution companies. Broadcasters as well are thinking about getting into the broadband businesses.

While all of these technologies are currently available, they require substantial amounts of capital to develop, test and market. About \$10 billion alone is needed to upgrade copper wire connections for DSL service. In the absence of deregulatory parity, some systems are more likely to advance quicker than others. Unfortunately, as the subscriber data show, in the current environment in which some services are subject to regulation or potential regulation, needed investments to develop the service are discouraged or made prohibitively risky.

It is our view that steps to remove regulatory asymmetries and, indeed, to move to a less regulated environment in high speed services are required to promote more rapid deployment of these services. Because competition has already emerged in this market sector with choices between copper wire, cable, satellite, and terrestrial, and fixed wireless, we should move as rapidly as possible to reduce regulation of high speed services.

Incumbent local operating companies, however, face real impediments to their investment in high speed services. The current requirements under section 251 of the Communications Act constitute a real disincentive to the types of investments required to upgrade their systems to offer broadband services. The CLECs clearly lag behind in building out their DSL networks, partly because the benefits of any investment would have to be shared with competitors.

The economist and famous deregulator Alfred Kahn made the case for a lighter hand of regulation in a recent filing in which he said: "If rivals can share use of whatever network facilities they ask for at prices explicitly intended to recover only the minimum cost of employing the most modern technology, it cannot but have a fatally discouraging effect on their initiative and their innovation efforts."

Senator BROWNBACK. Dr. Duesterberg, if we could wrap it on up I would appreciate it.

Dr. DUESTERBERG. I will wrap up by supporting your bill, Senator Broadback—Brownback. We think this goes a long way—

Senator BROWNBACK. Brownback.

Dr. DUESTERBERG. I apologize. I have the same problem with my name.

We think your bill goes a long way toward removing the current disincentives for investment by the CLECs. It is especially the relief from unbundling and resale requirements and from price regulations which are most significant for promoting investment.

There are other steps the Congress and the FCC could consider to advance the case of broadband deployment. These might include making more spectrum available for high speed wireless data services, which would be important to rural areas, creating transferable property rights for spectrum holders. Congress could also consider allowing more competition in the Internet backbone market.

All these steps would increase investment in broadband and stimulate broader competition and cannot fail but to result in quicker introduction of high speed services at lower prices in both urban and rural areas.

Thank you for this opportunity to appear before the Committee.
[The prepared statement of Dr. Duesterberg follows:]

PREPARED STATEMENT OF THOMAS J. DUESTERBERG, PH.D., PRESIDENT AND CHIEF EXECUTIVE OFFICER, MANUFACTURERS ALLIANCE/MAPI INC.

Mr. Chairman: I am pleased to appear before the Committee to present the views of the Manufacturers Alliance/MAPI Inc. (the Alliance) on S. 2902, the Broadband Internet Regulatory Relief Act of 2000. The Alliance represents over 400 companies across a broad spectrum of industries, including aerospace, automotive, electronics, defense, machine tools, pharmaceuticals, telecommunications, chemicals, oil and gas, and many others. Since our founding in 1933, we have been a voice for industry supporting policies which promote capital investment, productivity enhancement, innovation, free trade, and economic growth in our free enterprise system. We support Senator Brownback's legislation as a means to advance the economic goals we have promoted for over 65 years.

The Digital Economy

Before discussing some of the specific benefits of this legislation, I would like to discuss in the general context why more rapid broadband deployment, the goal of Senator Brownback's bill, is important to manufacturers and related service industries. The American economy—including the manufacturing sector—is enjoying one of the most sustained periods of robust growth in its history and has regained the international competitive advantage in manufacturing many thought was lost only a decade ago. One reason for this strong performance is the advent of what is being called variously the Digital Economy, the Information Economy, or the Internet Economy. Whatever is the proper name, the phenomenon of ever more connected and powerful information processing is at its core. It is both the explosive growth of connected computing and its system-wide efficiency effects which are contributing powerfully to the low-inflation, above-trend line growth we have experienced from at least 1995 through this year.

The U.S. Department of Commerce estimates that one-third of U.S. economic growth is attributable to the sustained expansion of the information technology sector.¹ Of more lasting significance are the system-wide efficiencies gained from the application of connected computing in all sectors of the economy. The Internet and its predecessors already have revolutionized the financial sector and now are increasingly changing the manufacturing and retail sectors as well. The Alliance recently held a conference on business-to-business (B2B) electronic commerce attended by nearly 150 companies. We learned that B2B sales are expected to grow from today's \$400 billion to nearly \$2.7 trillion, or 17 percent of total sales, by the year 2004. About 56 percent of U.S. companies are conducting B2B sales over the Inter-

¹U.S. Department of Commerce: *Digital Economy 2000*, Washington, DC, June 2000, p. vi.

net now, and over 90 percent anticipate doing so by 2002.² The advent of Internet-based communications and transactions also is adding to the efficiencies of manufacturing in numerous ways. Some of the more important Internet-enabled processes we discussed at our conference and now being deployed by manufacturers are:

- Coordinated product design between companies and across different locations,
- Improved human resource functions,
- Better management of inventories and supply chains,
- Remote training,
- Using auctions in both purchasing and selling,
- Improved customer services, and
- More efficient project administration and management.

The application of these new information technology and Internet-related processes in the manufacturing sector is one reason that this sector has performed well in an increasingly competitive, globalized environment. Productivity in the manufacturing sector has grown by an average of 6.1 percent for the three years ending in March 2000, which is substantially higher than any three-year period since 1950. Such sustained productivity growth, in turn, has helped keep the lid on inflation, an especially difficult achievement at this late stage in the business cycle given the low unemployment rate. Although one cannot attribute all gains in productivity to one factor—since other technological breakthroughs, management improvements, more efficient financing tools, etc., also are contributing factors—data from a recent study by the Federal Reserve Board indicate that up to 40 percent of the recent upswing in trend productivity growth is accounted for by increases in the stock of information technology.³ A recent study by Goldman Sachs estimates that total GDP growth can be enhanced by .2 percent per year from the spread of B2B electronic commerce alone.⁴ Anything that contributes to economic growth, higher productivity, and lower inflation is good for the bottom line of manufacturers as well as consumers.

The Role of Broadband Communications

Broadband telecommunications is playing an increasingly pivotal role in the advance of the digital economy. As both manufacturers and retailers move increasingly toward electronic commerce and the use of the Internet as a management tool, the need for ubiquitous high-speed connections grows more crucial. High-speed connections are needed not only to play video games and download movies but to do video conferencing, exchange design data on the thousands of parts that go into an automobile or an airliner, conduct auctions for raw materials, coordinate just-in-time delivery systems, facilitate distance learning, and promote telecommuting. If we are to achieve the projected gains from B2B e-commerce and, if over 90 percent of businesses are to be in the B2B environment in the next few years, we will require high-speed connections not only in the urban environments where high-speed connections are becoming more available, but also in more remote areas where many of America's factories are now located and where numerous American telecommuters would like to be. While billions of dollars have been invested in broadband networks since passage of the Telecommunications Act of 1996, fewer than 3 million users are now hooked up to them.⁵ Powering the digital economy and maintaining the pace of productivity enhancement responsible for the robust growth and global competitiveness of our industry will require more rapid deployment of broadband networks in both urban and rural environments.

² Bruce Temkin, Forrester Research: "What Does the Future Hold for Business-to-Business E-Commerce/E-Business," presentation to *Business-to-Business E-Commerce—A Look at Manufacturers' Best Practices for Thriving in the Digital Economy*, Arlington, VA, June 8, 2000. See also, *The Internet Economy Indicators*, www.internetindicators.com/facts.html.

³ See Jeremy Leonard, *How New is the "New Economy"? The Role of Information Technology Investment in Recent U.S. Economic Performance*, Economic Report 498, Manufacturers Alliance/MAPI, July 2000.

⁴ Cited in: "B2B E-Commerce About to Explode, Affecting the Economy in Every Way," *Daily Report for Executives*, Bureau of National Affairs, Washington, DC, July 19, 2000.

⁵ Data on high-speed connections are taken from: U.S. Department of Commerce and U.S. Department of Agriculture, *Advanced Telecommunications in Rural America: The Challenge of Bringing Broadband Service to All Americans*, Washington, DC, April 2000.

The Need for Regulatory Relief

There appear to be few technical and economic barriers to the deployment of broadband networks. In fact, there are numerous technologies which are now being tested and deployed for current use, and there is reasonable potential to have a competitive market for broadband services. Many of the barriers to rapid, near-term deployment of broadband services reside in the current regulation of the telecommunications sector. DSL (digital subscriber line) service across existing telephone lines and cable-based high-speed service have the most potential for near-term growth, but several satellite-based networks are being tested, as well as fixed terrestrial wireless systems. Fiber-optic cable directly to end users will be a viable option for some urban or high-capacity users. The just-announced entry of Enron subsidiary, Enron Broadband Services, and Blockbuster into the business of delivering movies on demand via fiber-optic cable also may portend wider use of this delivery mechanism to homes and rural areas. In the next few years, terrestrial wireless systems will roll out higher speed (up to 2.5 megabits per second or more) services which may be as ubiquitous as copper wire, cable, and satellite networks. Electric power distribution companies also are experimenting with the use of their systems for high-speed data offerings.

Around the beginning of this year, there were only about one-half million DSL customers, although this sector is growing rapidly. Over 1.1 million cable broadband subscriptions were in place at the same time, almost all to homes. At the beginning of this year, only about 40 percent of all households and 57 percent of small businesses had DSL service available to them.⁶ Fiber deployment at this point is minimal, although several regional Bells and other providers are experimenting with this technology. The number of wireless cable (or fixed wireless) and satellite subscribers is in the tens of thousands, and terrestrial wireless broadband offerings are not yet available. Urban areas are clearly better served than rural areas. In sum, the reality of broadband connectivity is lagging far behind its promise.

While all of these technologies are currently available, they require substantial amounts of capital to develop, test, and market. About \$10 billion alone is needed to upgrade copper wire connections for DSL service.⁷ In the absence of regulatory parity (or deregulatory parity), some systems are more likely to advance quicker than others. Unfortunately, as the subscriber data show, in the current environment in which some services are subject to regulation or to potential regulation, needed investments to develop the service are discouraged or made prohibitively risky. It is our view that steps to remove regulatory asymmetries and indeed to move to a less-regulated environment in high-speed services are required to promote more rapid deployment of these services. Because competition already has emerged in this market sector—with choices between copper wire, cable, satellite, and terrestrial fixed wireless now available in some places—we should move as rapidly as possible to reduce regulation in high-speed services.

Although cable operators are potentially restrained in upgrading their systems for high-speed data offerings by the threat of regulation of access at the local and state levels, recent court decisions and the restraint shown by the FCC thus far appear to create reasonable certainty that the threat will not become a reality. As a result, cable companies are investing billions to upgrade their systems to allow advanced data and voice services, although most are targeted at residential customers. Most other broadband technologies, such as the various forms of wireless services, face few actual or potential regulatory restraints on investment.

Incumbent local operating companies (ILECs), however, face very real impediments to their investments in high-speed data services. The current requirements under section 251 of the Communications Act for interconnection, unbundling, and resale of network elements used for advanced data services not only place the ILECs at a competitive disadvantage, but constitute a real disincentive to the types of investments required to upgrade their systems to offer broadband services. It is significant to note that 22 percent of DSL subscribers are using the services of competitive local exchange carriers (CLECs).⁸ The ILECs clearly lagged behind in building out their DSL networks partly because the benefits of any investment would have to be shared with competitors. The economist Alfred Kahn made the case for a lighter hand of regulation in a recent filing in which he stated quite bluntly that the section 251 requirements discourage investment. Kahn wrote: "If rivals can share use of whatever network facilities they ask for at prices explicitly intended to re-

⁶See Sanford C. Bernstein & Co., Inc. and McKinsey & Co., Inc., *Broadband*, New York, January 2000, pp. 27–29.

⁷*Ibid.*, p. 8.

⁸*Advanced Telecommunications in Rural America, op. cit.*, p. 22.

cover only the minimum cost of employing the most modern technology, it cannot but have a fatally discouraging effect on their own initiative and innovation efforts.”⁹ This analysis was reinforced in a 1999 letter to the FCC signed by the heads of 13 high-technology firms such as Compaq, Gateway, Intel, Cisco, IBM, Novell, and Kleiner Perkins. The signers argued: “It is a simple but undeniable reality that new and unnecessary regulation will diminish the willingness of capital markets to finance the construction of new broadband networks.”¹⁰

The experience of cellular telephony is instructive in this regard. After hesitating to grant operating licenses for over a decade, the FCC originally deemed that each market would have just two competitors, and one of these would be the wireline carrier. We now know that the technology is much more robust and competitive than that. In the case of broadband, I believe it would be a mistake to try to “manage” competition or to “handicap” competitors. The important thing is to get obsolete regulatory barriers out of the way and let technologies and markets develop, subject to the rigorous discipline of consumer choice.

Senator Brownback’s bill goes a long way toward removing the current disincentive for investment by the ILECs in broadband infrastructure and services. It is especially the relief from unbundling and resale requirements and from price regulations which are most significant for promoting investment. The Manufacturers Alliance supports such efforts to achieve regulatory parity and gradually lessen the regulation of the fast-moving and economically crucial high-speed telecommunications sector.¹¹ There are, of course, other measures Congress (and the FCC) could consider to stimulate an even faster transition to a ubiquitous broadband environment. These would include making more spectrum available for high-speed, wireless data services and creating transferable property rights for spectrum holders. Congress also could consider allowing more competition in the Internet backbone market. Such efforts to incentivize more investment in broadband and stimulate broader competition cannot fail to result in quicker introduction of high-speed services at lower prices. In turn, this would lower input costs to manufacturers and facilitate the more rapid deployment of Internet-based sales, marketing, management, and supply strategies by U.S. firms in urban and rural America alike. Senator Brownback’s bill is an excellent first step toward this goal.

I want to close by thanking Senator Brownback for holding this timely hearing and providing us with an opportunity to comment on this important legislation.

Senator BROWNBACK. Thank you, Dr. Duesterberg.
Mr. Glassman, welcome.

**STATEMENT OF JAMES K. GLASSMAN, RESIDENT FELLOW,
AMERICAN ENTERPRISE INSTITUTE, AND HOST,
TECHCENTRALSTATION.COM**

Mr. GLASSMAN. Thank you, Mr. Chairman, and Senator Breaux of my former home State of Louisiana. It is an honor to be here today.

My name is James K. Glassman. I am a Resident Fellow at the American Enterprise Institute, and I have to say immediately I am not an expert in the technical aspects of telecommunications. My interests lie, as many of yours do, at the intersection of the public policy, technology, and finance. For that reason, in February with some colleagues I launched a web site called TechCentralStation, whose slogan is “Where free markets meet technology.”

I spent the last 30 years as a journalist for *The Washington Post* and others and as an analyst advocating free market solutions to vexing public policy problems. I have become in recent months par-

⁹Quoted in Adam Thierer, “Broadband Telecommunications in the 21st Century: Five Principles for Reform,” *Heritage Foundation Backgrounder*, No. 1317, Washington, DC, September 1999, p. 19.

¹⁰See Jeffrey Eisenach, “Computer Industry Flexes Its Muscle,” www.intellectualcapital.com, July 28, 1999.

¹¹Thomas J. Duesterberg, *Broadband Access: Do We Need a Regulatory Solution?*, BL-9, Manufacturers Alliance/MAPI, February 2000.

ticularly concerned about new attempts by governments at all levels to regulate and tax the Internet.

So you might ask, why would an ardent supporter—why would I be such an ardent supporter of the 1996 Telecommunications Act? For this reason: The Act provides a way to move from an intensely regulated environment to a deregulated environment. That is the goal and, as many others and this Congress understood, that had to occur through a sensible transition since the incumbent operating companies had been nourished and protected as monopolies by government over the past century and thus owned the final mile or so to the customer's home. I liked Senator Dorgan's characterization of monopolies being cholesterol to the free market system.

So a compromise was reached after years of give and take. It was a noble compromise, a good compromise, that all parties appeared to support. But immediately after the bill was passed, the local monopolies began to file lawsuits. Finally, after litigation and foot-dragging, at long last one of the Bells was certified to have opened up in New York, where I now live. The competition as a result has become fast and furious, where 4 years ago it was nil.

Yes, there are problems in New York, as I am sure there will be in Texas, which is the second State to be certified. But in New York prices are falling and broadband hookups are proliferating. The system is working.

Now, with competition here at last, we find the ILECs appealing to Congress to roll back the Telecom Act with such bills as this one. No wonder. Competition is no fun for competitors, especially for companies that used to be monopolies. But competition is great for consumers.

In seeking political help to thwart competition, the ILECs are not alone. Sadly, it is becoming more and more common for high tech companies to ask government for help and for government, unfortunately, to provide it, as I showed in an article I wrote in April in *The Wall Street Journal* with the headline "Is government strangling the new economy?" With your permission, I would like to enter that article in the record.

Senator BROWNBACK. Without objection.

[The material referred to follows:]

Is Government Strangling The New Economy?

By James K. Glassman

04/10/2000

It's not hard to understand why Microsoft's stock price plummeted in the wake of Monday's unfavorable court ruling, but what explains the decline of the other high-tech companies that dominate the Nasdaq Stock Market?

Just look at Microsoft's competitors, the companies that were supposed to benefit from the federal government's lawsuit. Scott McNealy, CEO of Sun Microsystems and one of the most aggressive Microsoft antagonists, was gloating in a press release Monday after Judge Thomas Penfield Jackson's ruling. But Sun's stock dropped \$3.75 that day. America Online owns Netscape Communications, whose complaint touched off the federal suit. AOL stock fell 7% in two days. RealNetworks, cited by Judge Jackson as suffering from Microsoft's "oppressive thumb on the scale of competitive fortune," was down 13%. Two makers of operating systems that compete with Microsoft's—Red Hat Software and Apple Computer—also dropped.

Changing Environment

The rout in Nasdaq stocks—which only began to bounce back a little Wednesday—has been broad and deep. The breakdown of settlement talks in the Microsoft

case was only the catalyst. What investors are realizing is that the environment that helped produce the high-tech boom—low regulation, low taxes, minimal government intervention and a low level of corporate rent-seeking—is changing profoundly.

In the past, no one told the entrepreneurs in the garages of Silicon Valley what products to invent, how to sell them, what prices to charge or what deals to offer. Now, the new economy is beginning to look more like the old—an environment in which the winners are not necessarily the companies that please customers the most but the companies that do best at keeping government at bay—or, better yet, at using government to thwart competitors. Stock prices are falling because the risks to real innovators are rising.

The pundits continue to argue that tech stocks are in a “bubble.” They said the same thing a year ago, when the Nasdaq was 40% lower than today—not to mention five years ago, when it was 80% lower. By this reasoning, stock prices are falling because they are too high. It is as if the law of gravity suddenly decided to kick in at, oh, around 5000 on the index.

But the question is why now? The answer is the increased threats of intervention in technology markets—threats made especially vivid by the Microsoft decision. To be specific:

- *Doing a Smith & Wesson.* The same team that gang-tackled the makers of cigarettes and guns is going after not just Microsoft, but smaller high-tech companies. The Justice Department, state attorneys general and plaintiffs lawyers are setting their sights on such firms as DoubleClick, the Internet advertising company accused of privacy abuses. “We want to do a Smith & Wesson-like thing with DoubleClick,” said Jennifer Granholm, attorney general of Michigan, last week.

Commenting on Ms. Granholm’s statement, legal critic Walter Olson wrote: “We suppose this means that she and her colleagues want to invent far-fetched legal theories to attack business practices that have long been regarded as lawful; file a great flurry of suits in multiple courts so as to overwhelm the designated opponent; use the threat of bankrupting legal expense to muscle it into submission . . . and instill fear into other businesses that the same thing could happen to them unless they cooperate.” DoubleClick, by the way, is down 38% since the onslaught began.

- *Biotech blast.* In a statement last month, President Clinton and British Prime Minister Tony Blair made veiled threats about ending private ownership of human genome information. Prices of biotech stocks tumbled one-third (though Wednesday Mr. Clinton backtracked on his remarks).
- *Taxing e-commerce.* Ever since Congress nearly unanimously approved a moratorium on new Internet taxes, the National Governors’ Association has pushed aggressively to tax electronic sales across state lines. Gov. Jim Gilmore of Virginia, who heads the federal commission examining the matter, worked hard for a ban but failed. Studies show that sales taxes would throttle the rapid growth of e-commerce and depress revenues of Internet companies.
- *Revenge of the middleman.* One of the joys of the Internet is that buyers can go directly to manufacturers for their purchases, cutting costs all around. But dealers, suppliers and agents are feeling the squeeze. Rather than devise new clicks-and-mortar strategies, these middlemen run whining to politicians for help.

In South Carolina, auto dealers are pushing a bill that would prohibit car makers from owning dealerships and would explicitly bar Internet sales unless local dealers get a piece of the action. Charles Condon, attorney general of South Carolina, said of the bill: “What if we passed a statute saying cars couldn’t be sold on a particular highway? Wouldn’t there be outrage? Why is there no outcry when cars cannot be sold on the information superhighway?”

- *Broadband slowdown.* Companies are appealing to politicians to increase telecommunications regulations on the Internet—an effort that threatens to hold up faster broadband technologies, already delayed by bottlenecks caused by local telephone companies. For a year America Online campaigned in Congress, in state legislatures and in city councils across the nation to get laws passed that would force cable companies like AT&T and Cox to permit AOL to use, at government-fixed terms, their high-speed cable pipelines. Then, in January, AOL announced it was buying Time Warner; suddenly the shoe was on the other foot.

But, as George Gilder pointed out on this page recently, it may be too late to say “Never mind.” The San Francisco Board of Supervisors is on the verge of mandating cable access, and decision by a Portland, Ore., municipal body regulating Internet-by-cable is now in the courts. If Portland wins, thousands of local governments can become Internet regulators.

No one ever knows for sure why a stock falls on a given day, but my interpretation of Nasdaq’s sharp decline is that investors, jarred by the Microsoft decision, have suddenly woken up to these threats of government intervention. If they haven’t woken up, they had better. And so should Al Gore. The Clinton administration likes to take credit for a stock market that has quadrupled in the past decade. It can’t avoid the blame for Nasdaq’s collapse.

General Carnage

While Joel Klein and his Justice Department lawyers were publicly and distastefully celebrating Judge Jackson’s decision, the market capitalization of Microsoft was dropping by more than \$100 billion. That’s not some theoretical figure. It is a loss in real wealth—in many cases, in retirement savings—of more than two million direct shareholders of Microsoft and of tens of millions more who have substantial holdings of Microsoft in their mutual funds and annuities.

But Microsoft is only part of the story. The Nasdaq carnage has been wide-ranging. And why not? The Internet intervention of government, often in league with trial lawyers, threatens every high-tech firm in America.

James K. Glassman is a fellow at the American Enterprise Institute, host of www.TechCentralStation.com and a member of the advisory board of Americans for Technology Leadership, a group supported by Microsoft and other tech firms.

Mr. GLASSMAN. Let me make a few quick points about this legislation. First, the Telecom Act is working. Do not change it. Two of the largest States in the country have been certified. The Yankee Group predicts that the number of homes subscribing to broadband services will rise from 1.4 million this year to 16.5 million in 2004. That is an incredible pace.

Second, the CLECs are well equipped now under current law to vastly expand their broadband services. Permit me also, Mr. Chairman, to enter into the record a remarkable article that appeared just last month in *FORTUNE* magazine by Stephanie Mehta about SBC Communications. The headline was “Why the biggest Baby Bell is wild about broadband.” That article quotes the CEO of SBC as saying that his company has launched Project Pronto, which will sell one million broadband DSL connections by the end of 2000 and two million by the end of 2001, up from 139,000 at the beginning of this year. SBC is spending \$7 billion to upgrade its system and it expects to get that money back quickly and more in productivity gains. This is without, Mr. Chairman, your legislation.

[The material referred to follows:]

Why The Biggest Baby Bell Is Wild About Broadband

By Stephanie N. Mehta

06/12/2000

SBC Communications, the runt of Ma Bell’s litter, amazed telecom rivals by devouring its siblings and becoming a giant. Now it’s attacking the cable guys with a massive rollout of high-speed phone lines for Internet service.

Edward E. Whitacre Jr., the plain-talking CEO of SBC Communications, is in his headquarters in San Antonio, telling how much he likes the Internet. He volunteers that he has used his home computer to buy shoes and books online, and to send and receive digital photos of his 2-year-old granddaughter. That’s all very charming, yet something’s wrong with this picture: While Whitacre’s executive suite has plenty of room for outdoorsy items such as golf clubs and fishing paraphernalia, there isn’t a PC to be seen. Asked about it, Whitacre seems unembarrassed. He just shrugs

and says he's not in the office enough to need a computer; his secretary and other aides handle the e-mail.

You'll find similar disconnects—is it e-schizophrenia?—all over SBC. As recently as two years ago, a visitor to the company's nondescript corporate offices wouldn't have heard much talk of the Internet; Whitacre and his lieutenants were focused on buying other phone giants, hawking second phone lines to households, and imploring regulators for permission to offer long-distance calling services. Such concerns are still crucial to SBC's lucrative \$50-billion-a-year business, but they're no longer what the executives want to talk about. They steer the dialogue to nerdy topics such as Web hosting and the superfast online connections the company is unleashing across the country. "SBC is going to be a major player in e-commerce and the Internet," Whitacre declares. "We are not just caretakers of the network."

Investors, unsurprisingly, are skeptical at the notion of a Baby Bell morphing into a broadband data company that can compete with, say, MCI WorldCom or Qwest. In the midst of the Internet boom, SBC stock has remained a stubborn underachiever, trading recently at \$42 a share with a lackluster P/E ratio of 22 times trailing earnings.

Yet something strange has happened in recent months: By combining local monopoly power, marketing ingenuity, and financial brute force, SBC has emerged as the most formidable challenger to cable-TV companies in the race to deliver broadband Internet access to the home. Whitacre has declared that SBC will spend \$6 billion over the next three years to make fast Internet connections available to most of the company's 36 million business and residential customer locations.

Quaintly named Project Pronto, the plan calls for SBC to sell and install a million connections by the end of this year alone, up from a mere 139,000 on Jan. 1. If Pronto works, it will open the way for SBC to add billions of dollars in annual revenues. The typical household that today pays SBC \$20 a month for plain-vanilla local phone service could fork over \$40 a month more for fast Internet service, plus money for add-on fare such as online 3-D games and even movies.

Of course, every Baby Bell would love to transform itself from staid telephone monopolist to player in the Internet economy. But some smart money in telecom and on Wall Street is starting to like SBC's odds. Janus Capital, the Denver mutual-fund company, which manages over \$270 billion, recently bought more than three million SBC shares for some of its growth-oriented funds. Analyst and portfolio manager Matt Ankrum thinks SBC will succeed in shifting revenue growth from traditional phone service to broadband. "What got us interested in SBC is that through its broadband initiatives it will increase the return on investment capital over time," he says. "That ultimately drives stock-price performance."

The smart money also likes SBC's size: With some 61 million access lines in 13 states, SBC can absorb the cost of deploying high-speed lines while driving suppliers to quickly develop cheaper, more reliable gear for its data networks. And it can leverage its relationship with millions of households to push fast phone connections and other services into the mass market. "SBC can dramatically change the market conditions in terms of Internet momentum," says Don Listwin, executive vice president of Cisco Systems, which recently formed an alliance with SBC under which the telco will buy \$1 billion of Cisco data-networking gear and help develop new products. While SBC may not be Cisco's most technologically advanced customer, Listwin explains that its size makes it an attractive partner: "If you remember your physics, momentum is mass times velocity. They have a lot of mass."

Fifteen years ago, the old Southwestern Bell might have been voted the telco least likely to succeed. The smallest Baby Bell, it emerged from the breakup of AT&T with operations in just five states—Texas, Arkansas, Oklahoma, Kansas, and Missouri. Two of the region's main industries, oil and real estate, were in the dumps, and SBC's growth prospects were as flat as much of the terrain. While other Baby Bells moved to buy cable companies or contemplated making bids for Hollywood studios, SBC's big plan for growth was to create a national yellow-pages business—a scheme it quietly abandoned after a few years. Yet in 1986 SBC stunned Wall Street by making an aggressive \$1.4 billion bid for Metromedia's cellular-phone operations. It showed that this seemingly dowdy carrier could dance. The deal made SBC an overnight leader in wireless, now a \$7-billion-a-year franchise for the company.

The pace of change picked up when Whitacre took over as CEO in 1990. Born in Ennis, Texas, and schooled at Texas Tech, Whitacre is a flinty 37-year telco veteran who started as a facility engineer. One of his first moves was to relocate Southwestern's headquarters from St. Louis to San Antonio, where the company could be closer to TelMex, a south-of-the-border telco in which SBC had an investment, and where the CEO thought SBC's best growth opportunities lay.

Under Whitacre, SBC quickly went from milquetoast to industry intimidator. Like most Bell CEOs, he had served a stint in the company's regulatory affairs depart-

ment, and he immediately set to work getting the goal posts moved in SBC's favor. While some Baby Bells were grudgingly opening their markets to competitors, SBC spent heavily, successfully lobbying Texas legislators to pass a law making it harder to compete against SBC in its new home state.

The growth strategy that Whitacre would use to transform SBC from the smallest Bell to the biggest was born of necessity. In February 1996, President Clinton signed sweeping legislation that nixed SBC's guard-the-monopoly approach by forcing all the Baby Bells to open their markets to rivals. Faced with the prospect of losing market share, the Bells set out in different directions. BellSouth, in Atlanta, and Ameritech, in Chicago, invested heavily in telecoms abroad.

Whitacre saw no reason to go that far afield. Days after the law was signed, he assembled his top managers at an Ojai, Calif., inn and declared that the way to grow would be to buy more local telephone lines in the U.S. and reduce costs by eliminating overlapping operations. Using its stock as currency, SBC made a bold \$17 billion bid for sibling Pacific Telesis just a few weeks afterward. It later also acquired Southern New England Telecommunications, gaining a foothold in the Northeast, and last year—after 18 months of regulatory hearings—completed a \$72 billion acquisition of Ameritech. The deals expanded SBC's reach to 13 states, a power base from which to pursue the ambition that Whitacre had laid out for a visitor in 1997. Predicting that the telecom industry would consolidate into a handful of international full-service companies, he promised then that SBC would be one of them.

SBC digested its acquisitions with the efficiency and coolness of a true predator. Whitacre typically has little use for the senior officers of the companies he acquires; he doesn't try to blend management teams the way his counterparts at Bell Atlantic and AT&T have. At headquarters he is surrounded by trusted, like-minded no-nonsense executives. Few high-ranking SBC executives have fled to dot-coms or telecom startups—they are fiercely devoted to Whitacre, who enjoys a sort of Clint Eastwood status among his direct reports. A lot of statements at the San Antonio offices start with some variation of the phrase, "Ed says."

Whitacre's prediction that the phone business would boil down to a gang of giants has become reality—and they are all gunning for SBC's most lucrative customers. Bell Atlantic, on the verge of completing its merger with GTE, has vowed to enter some of SBC's markets. MCI WorldCom and Sprint hope to combine in a deal that would create a formidable provider of data, phone, and wireless services to U.S. businesses and households. AT&T has spent more than \$100 billion amassing cable-TV systems over which it will offer phone, entertainment, and broadband services. "We are going to lose market share in our traditional businesses over time," says SBC vice chairman Royce Caldwell. "It's almost preordained."

Like most telecom and cable companies, SBC sees broadband as essential to growth in the competitive crush. The Internet's popularity, even via slow, clumsy dial-up connections, makes it a cinch that demand for fast, convenient broadband access will be huge. A study by the Yankee Group, a consulting firm in Boston, predicts that in 2004 more than 16.5 million households will plug into the Net via some broadband connection, vs. just 1.4 million at the end of last year. Eventually, when such high-speed services are ubiquitous, the broadband battle will be fought with weapons such as price and marketing. But for now, the technological challenge of delivering broadband to households is so formidable that large tracts of the market lie open to whichever competitor can get there first. "The early race is just to sign up customers," says Tod Jacobs, a telecom strategist at J.P. Morgan. "Whoever locks up the customer early will clearly have an advantage going forward. The customer experience tends to be so good in broadband that customers don't easily switch."

Without question, cable companies have the lead in this giant land grab. Their cable modems were delivering broadband Internet service to about one million households by the end of last year. The phone companies, meanwhile, reached about 300,000 households using a rival technology called digital subscriber line, or DSL, which hooks up to ordinary copper telephone wire. From a user standpoint, cable modems and DSL are roughly equal. Both are "always on," which means the connection to the Internet is instantaneous. Both are plenty fast, even for demanding tasks like downloading video. Cable companies claim their modems can receive data at up to three megabits per second (about 50 times faster than a standard 56K dial-up modem), but industry executives privately admit that, in practice, customers never pull stuff off the Internet at those speeds. SBC's DSL offer pledges speeds of 1.5 megabits per second—half as fast as cable broadband advertises—but the company says that in some neighborhoods downloads will be much faster.

Project Pronto is designed to overcome DSL's major shortcoming: The technology works only on "clean," relatively short copper lines that don't stretch more than three miles from the customer to the telco's central office. Part of the \$6 billion price

tag involves building curbside switchlike facilities in far-flung neighborhoods. With this investment, SBC believes it can reach 80% of its customers with DSL.

So far, by analysts' estimates, the company has reached the 250,000 mark in installed lines—good, but a long way from the million it needs to meet Whitacre's goal. SBC has been hooking up customers free and giving away the expensive DSL modems. And in an un-Bell-like concession to consumers' busy lives, the company recently launched Saturday "drive ins" in some cities. Customers sign up to bring their computer to an SBC facility, where a technician will equip the PC with the gear it needs to receive DSL service. Thus, working folks don't have to take a day off to wait for a technician, and SBC saves money by avoiding a costly truck roll.

Users' experiences ordering DSL from SBC are far from hassle-free, however. Customers complain of having to wait weeks to get the service, even if they live close to a central office. They also give SBC low marks for the ordering process. "The bad news is that, prior to your installation, the people you talk to are clueless," groans Bob Watson, a 46-year-old Los Altos, Calif., resident who ordered DSL from SBC's Pacific Bell unit last year. The good news? Since the installation, Watson says, "It's been working great." SBC has launched a training program to get its order takers up to speed on Project Pronto.

Such glitches haven't kept SBC's marketers from attacking its cable-TV rivals. SBC's advertising takes potshots at cable-modem systems that, in theory, can bog down if too many users in a neighborhood do things like download video at once. A clever commercial that has aired in several SBC states depicts discord in a suburb where the residents have cable modems. A homeowner laments in a voice-over that before cable Internet service, the fictitious town "used to be a nice place to live." Onscreen a man surreptitiously snips his neighbor's cable line with gardening shears; neighborhood kids taunt a frazzled-looking adult, screaming, "Web hog!"

Cable operators aren't happy about this negative campaigning. AT&T, one of the largest cable providers, says that while traffic jams are a potential problem for its broadband systems, they can easily be remedied by adding extra equipment at the "node" serving a neighborhood. And AT&T scoffs at SBC's technology. "You never see [new competitors] try to build over us with a copper-loop network," sniffs Tony Werner, chief technology officer of AT&T's broadband unit. "This is really an effort to spruce up a 100-year-old network."

In the broadband war, cable operators can be hyperaggressive too. Time Warner Cable (which belongs to the same company as *FORTUNE*) caused a flap in May when its managers in Houston asked employees to order, then cancel, broadband service from SBC. The idea was to find out exactly which areas SBC could and could not serve. Higher-ups quickly squelched the scheme; SBC complained to federal regulators.

The question now is whether SBC can move fast enough to impress an increasingly fickle Wall Street. So far, Project Pronto hasn't budged the share price. "Our stock has not reflected the value we're creating," says CFO Don Kiernan. "Investors like what we're doing, but they're saying, 'Prove it, give us evidence.'" SBC figures its stock should trade between \$73 and \$82 a share, based on a sum-of-the-parts valuation. Kiernan likes to point out that SBC has delivered on promises before. It achieved cost savings from the Pacific Bell merger faster than expected, and it hasn't missed analysts' earnings estimates since Whitacre took over as CEO. That's a big reason Janus Capital bought the stock. The broadband story is "what got us interested," says portfolio manager Ankrum. "Then you ask, 'Do they have the right management team with the right strategy?' We think the answer is yes."

Even though SBC's bread-and-butter local telecom business continues to generate billions of dollars in cash each year, the company needs Project Pronto and other growth schemes to attract investors. SBC has been working on plans to sell phone and Internet service to customers outside its 13-state footprint. It forged a joint venture with BellSouth to combine their cellular operations, boosting SBC's wireless reach by 50%. SBC continues to fight for permission to offer long-distance services in its home regions. And as SBC becomes a national company, it expects to sell DSL services to corporations that want employees to work from home. (It has a contract with IBM to provide residential DSL for some 15,000 telecommuting employees in California, Texas, and Connecticut.) Within just a few years, SBC says, all these new lines of business will represent 50% of its revenue, up from about a third today. "We believe SBC is one of the clear surviving telecom companies," says J.P. Morgan strategist Jacobs.

SBC is already thinking beyond Pronto. Indeed, a time will come when consumers will expect more from their speedy Internet hookups than from always-on eBay. To keep its customers happy, and to attract a new breed of broadband junkies, SBC will have to start pushing attractive fare through those big pipes. Movies would be a natural, but games and home-security systems are also under consideration.

"We're looking at a whole palette of applications to help customers manage their lifestyles," says Abha Divine, a member of SBC's corporate-strategy team. She is helping develop an "online home" product that acts as a sort of electronic mom, keeping track of appointments and phone messages, and paying the bills electronically. Divine hopes to see a version of the service available to consumers next year.

SBC employees may not know it yet, but Whitacre has already picked a goal for next year's DSL deployment. "We'll get a million customers this year, and double that next year," he vows. And for anyone who doubts that SBC's future is firmly hitched to the Internet, he has a message. "Broadband will be indispensable, and it's going to happen pretty quickly," says Whitacre. He pauses, then draws a comparison with a technology he knows pretty well. "It will be as basic as telephone service." Maybe there's a good reason after all to listen to this guy without a PC.

Mr. GLASSMAN. Third, changing the Telecom Act will necessarily produce uncertainty in the minds of investors. Thanks to the Act, in just 3 years 300 CLECs have sprung up with \$100 billion in market value. They are investing that money in new, deeper, broader systems. You in Congress should be proud of this Act that has made this possible.

Uncertainty is the enemy of investors and of companies needing to raise capital. This bill will produce uncertainty. That is the lesson about uncertainty of a book that I co-authored with Kevin Hasett called *Dow 36,000*. The point we make about the stock market is that as uncertainty has diminished stock prices have risen.

But if you fiddle with this legislation, with the Telecom Act, make no mistake, if this bill passes the flood gates will open and other legislation will pour through. I believe that investment will slow sharply. Who will suffer? Consumers, your constituents.

Fourth, this bill will just about assure that CLECs will be limited in sharing old-fashioned technology or they will just have to build out their own networks at prohibitive cost. That was not the intention of the Telecom Act. In effect, this bill brings back the old monopoly that we thought the Telecom Act had buried.

Fifth, the Telecom Act is not holding back the deployment of new technology by the ILECs. In the first place, before the law, even though DSL had been available for many years, it was not deployed. The Act itself touched off competition from cable, from fixed wireless, from satellites, and as a result we now have a boom in DSL. As Senator Lott, the Majority Leader, said, deployment is happening not despite the Act, but because of the Act.

Finally, just very briefly, Mr. Chairman, to refer to your question about rural constituents, how can your rural constituents be served. Basically, by the same way that they are served by Coca-Cola or Ford or buy clothes provided by Walmart—through market forces. The question really before us in the public policy sense is how to unleash those market forces, and I believe the Telecommunications Act does that.

In short, Mr. Chairman and Members of the Committee, the Telecommunications Act of 1996 is working. As a fierce advocate of free market solutions and a believer in the power of technology to improve the lives of all Americans, especially disadvantaged Americans, I say do not change this Act; if anything, enforce it.

Thank you.

[The prepared statement of Mr. Glassman follows:]

PREPARED STATEMENT OF JAMES K. GLASSMAN, RESIDENT FELLOW, AMERICAN
ENTERPRISE INSTITUTE, AND HOST, TECHCENTRALSTATION.COM

Don't Roll Back the Telecom Act. Enforce It.

Mr. Chairman, Members of the Committee, I appreciate the opportunity to share my views on the bill under consideration today.

My name is James K. Glassman, and I am a resident fellow at the American Enterprise Institute. I am not an expert in the technical aspects of telecommunications. Instead, my field of interest is intersection among technology, finance and public policy, including such issues as Internet privacy, high-tech antitrust, Web taxation, and, of course, dissemination of broadband technology. It is to examine such issues that, with some colleagues, I launched a website in February called TechCentralStation.com

My background is as a journalist. Many of you will remember that I was editor of Roll Call from 1988 to 1993. For six years after that, I was a columnist on financial and economic issues for *The Washington Post*. It is no secret that I have spent my 30 years as an analyst and journalist advocating free-market solutions to vexing public-policy problems.

My aversion to unnecessary government regulation is exceeded only by enthusiasm for the New Economy—an economy made possible by new technology delivered in an atmosphere of healthy competition, with minimal political involvement.

Our country and our economy have come a long way since Ronald Reagan was credited with saying: "If it moves, we tax it. If it's successful, we regulate it. And if it fails, we subsidize it."

But the journey is not over. And this new economy of which we are so justifiably proud is facing a threat.

I'm not talking about the precipitous drop in NASDAQ prices this spring or the shakeout in dot-com companies. Those are just symptoms.

The threat that disturbs me is the recent trend for some companies to use the power of government to thwart competition—even if that means increasing government's involvement with the business of technology.

That is what's going on right now in the telecommunications industry. The industry that's the delivery vehicle for the Internet—the enabling industry of the new economy.

The grandly named Broadband Internet Relief Act is pretty clearly a device for rolling back the competitive provisions of the Telecom Act of 1996. Instead of rolling back the Telecom Act, we need to enforce it.

That Act was a remarkable accomplishment—a solid initiative, a gesture of statesmanship and compromise by government, to get itself out of a vital national industry. It was designed to replace regulated monopoly in the local telecom services industry with vigorous competition. And vigorous competition is the only guarantee for the rapid deployment of advanced technology at the lowest possible prices to all areas of the country.

The best thing I can say about the Telecom Act is that it's working. It took a while, but it is working.

A new class of competitive local exchange carriers has been created, known as the CLECs. And even though the incumbent regional monopolies still control 90 percent of the total market and as much as 98 percent of the voice market, the new competition is turning up the heat. These CLECs, some 300 of them, have a market value of more than \$100 billion. They did not even exist before the Act.

The presence of competition is finally having the classic economic effect that Congress intended. We're seeing an upsurge in deployment of broadband Internet services, by the incumbent companies as well as their new competitors. The Yankee Group predicts that the number of homes subscribing to broadband services will rise from 1.4 million this year to 16.5 million in 2004, an incredible pace.

The ILECs are dusting off the DSL technology they have had available for 10 years and installing it in the marketplace. Why? Clearly, because of competition. Look at SBC Communications. A June 12 article in *FORTUNE*, headlined, "Why the Biggest Baby Bell Is Wild About Broadband," discussed SBC's Project Pronto, a plan to install 1 million broadband connections by the end of this year and 2 million by the end of 2001—from just 139,000 on Jan. 1, 2000. "SBC believes it can reach 80 percent of its customers with DSL," said the article.

SBC's CEO said earlier this month that his aim was "to completely transform SBC and its companies into a data-centric business." And—understand—these claims were made, and well received by Wall Street, without the expectation that the legislation under consideration here would become law.

For as long as anybody can remember, the local services market was the equivalent of a no-substitutions box lunch served up by the incumbent telephone compa-

nies. But now that market is beginning to seem more like the food court at the mall. Not only a choice in menu, but a growing choice in providers.

The job of public policy right now is to see that everybody in this country has access to this smorgasbord, not to shut it down. But make no mistake about it, passage of S. 877 would close the food court before most Americans get a chance to fill their tray. This bill would tell America that the promise Congress made in 1996 has been rescinded—just as we were beginning to feel the tangible benefits.

Customers and investors won't stand for that. Competition in the local services market is crucial to delivering advanced services. And advanced services are crucial to the growth of the new economy. We can't afford to drop competition in the local telecom market as though it were last year's fad.

But S. 877 would come dangerously close to doing just that. Its basic provisions amount to a recipe for concentrating market power back in the hands of the ILECs. The danger of re-monopolizing the market can't be overlooked. And if the agreed-upon requirements for local service competition were dropped, it would open the possibility for the ILECs to make a back-door entry into the long distance market, where they could leverage their monopoly position in local service to compromise the surging competition in long distance.

This bill would basically excuse the incumbent monopolies from their obligation to provide new competitors with interconnection to the ILEC networks at reasonable prices under reasonable conditions. That obligation and the checklist that goes with it are central to the success of the Telecom Act. Take away these competitive requirements and you take away the ILECs' incentive to deploy new technology.

Of course, well-intentioned advocates of S. 877 would say just the opposite. They see this bill as providing an incentive for the big incumbent companies to deploy broadband technology faster by freeing them from burdensome regulatory requirements. This is nonsense.

Mr. Chairman, I stand second to no one in my contempt for burdensome regulatory requirements. But I also recognize that the local telephone monopoly was established and enforced over the past century by government. And no such monopoly will open its market to competition without a firm push. The competitive requirements of the Telecom Act provide that push.

Those requirements are not holding back the deployment of new technology by the ILECs. To the contrary. The incumbents are deploying the technology now and will continue to deploy it for two fundamental reasons: One, the prod of competition. And, two, new technology like frame relay, packet switching and other applications generate billions of dollars a year in productivity improvements.

Just look at SBC's Project Pronto. It's a \$7 billion investment in broadband. Advocates of S. 877 would say that SBC needs freedom from competitive requirements to finance the cost of this investment. But the view on Wall Street is that SBC's ambitious \$7 billion investment will bring the the company \$9 billion in productivity improvements.

And on the subject of technology, the proposed bill just about assures that any new competitor who did get access to the incumbent's network would be limited to sharing old-fashioned circuit-switched technology. Anything newer than that would be excluded under the heading of "advanced services."

If a new competitor wants to offer the advanced services that we all want, that competitor would have to build its own network, which is a prohibitive cost for most new competitors. This is an approach that was specifically rejected by Congress when the Telecom Act was drafted. It would be nothing more than a roadblock to competition, and our goal should be tearing down roadblocks, not installing them.

Let's review some history. It was not easy to get the Telecom Act passed, but all parties to the act agreed to its provisions. Then, the lawsuits from the local telco monopolies began. Finally, after much litigation and footdragging, a local Bell was certified as having completed its interconnection requirements in a single state, New York, where I live. I can tell you that the competition there—for local service, broadband, long distance, you name it—is hot and heavy. DSL rates are falling sharply. Now, Texas has been approved. We are on our way. But it is at just this time that the local incumbents want to roll back, to gut, the Telecom Act. Why? Maybe they don't like the heat of competition. I can't blame them. Competition is no fun for longtime monopolies, or for any company, for that matter. But it is wonderful for consumers. They are the winners.

The legislation under consideration would have another effect: It would increase uncertainty in the markets. Investors need assurance that the rules of the game will stay the same. When they commit billions of dollars, they need to know that Congress won't change the competitive climate by passing bills that favor one group of companies over another. Why was investment put on hold for about three years prior to the passage of the Telecom Act of 1996? Because few investors wanted to

put their money down if they did not know what game they were playing. Now, they know. Don't change the rules of the game in the middle, or the investors will find another game—perhaps in another part of the world. And American consumers will suffer.

Let me also comment on one other specific provision of S. 877, the issue of reciprocal compensation.

Like so many other telecom issues, reciprocal compensation is complicated in the details, but simple in its fundamentals. It says that one communications carrier should be fairly compensated when it handles incoming calls from another communications company.

But now, this proposed bill would deny reciprocal compensation to the CLECs who handle the calls coming in to Internet Service Providers from ILEC customers. Mr. Chairman, this provision is the public policy equivalent of spot zoning. It is public policy targeted for the special interests of the few, instead of the general good of the many.

In effect, this accommodation of the ILECs' wishes would drive up the cost of Internet access for millions of users. That's not a legacy that this or any other Congress wants to pass along to the American people.

In summary, Mr. Chairman, I would urge the Senate to stay the course with the Telecom Act of 1996. It needs to be enforced, not destroyed. We're seeing progress now. We'll see much more in the years ahead. Real competition in local services will speed the arrival of 21st Century technology to American homes.

And it will create major growth opportunities for companies in the telecom market, including the very same companies who are now looking to government to throw competition into reverse.

Thank you very much.

Senator BROWNBACK. Thank you, Mr. Glassman. I look forward to some questions to engage you as one who is for deregulation, and the bill directs that way as well.

Mr. Pitsch.

STATEMENT OF PETER PITSCH, COMMUNICATIONS POLICY DIRECTOR, INTEL CORPORATION, ON BEHALF OF THE INFORMATION TECHNOLOGY INDUSTRY COUNCIL (ITI)

Mr. PITSCH. Thank you, Mr. Chairman, Senator Breau. My name is Peter Pitsch. I am Director of Communications Policy at Intel. I am here today to testify on behalf of ITI, the Information Technology Industry Council. ITI is an association of leading information technology companies, the leading computer hardware, software companies, the leading ISPs, and Internet networking companies. Our companies employ over a million people in the United States and our annual revenues in 1999 were over \$460 billion.

On behalf of ITI and its member companies, I want to thank you for this opportunity and I want also to endorse S. 2902, the Broadband Internet Regulatory Relief Act. In my oral testimony I want to make four main points.

First, that ITI believes that the rapid deployment of broadband, affordable broadband technology, is absolutely crucial to the achievement of the full potential of the Internet and absolutely crucial to the success of high tech companies, and that the best means of achieving that goal is to rely on market-based competition unless there is a competitive bottleneck, a substantial competitive bottleneck.

Second, ITI believes that S. 2902 meets this deployment goal and these competitive principles precisely because if it were enacted it would encourage more rapid deployment of broadband technology to consumers through deregulation without undermining the competitive process. Unbundling the ILECs' packet services and freeing

them from unbundling regarding fiber deployed to residences would clearly increase the incentive to deploy. Today if they make investments and they fail, they deploy in marginal markets, in medium or small size markets, that fails, their shareholders take the entire loss. If they succeed, they have to share that success with competitors at some regulated, forward-looking economic cost.

Third, while S. 2902 does remove significant regulatory barriers, we believe, ITI believes, that it sufficiently protects or safeguards competition because it requires the existing network to be unbundled. I think this is a very important point which I want to amplify on or, as we at Intel say, drill down on, because I do not think that a lot of the testimony to this point has really hit this crucial aspect of the bill.

To get deregulated, an ILEC first must meet very important buildout benchmarks. Essentially, it must make advanced services available to 80 percent of its customers within 3 years and 100 percent within 5 years. Now, besides directly benefiting consumers, this may actually increase the number of DSL-capable loops available to competitors.

Also, deregulation is conditioned on the ILECs complying with Commission and State collocation and loop provisioning requirements. ITI has long maintained that the incumbents have to make these essential facilities available to their competitors. Indeed, this legislation would increase the incentive to be in compliance with these very rules, which are essential for them to compete.

Indeed, the Act, this bill, goes so far as to require the telephone companies to, upon request, make existing copper available even where they have deployed fiber into the distribution network. Thus, on balance we think S. 2902 is a very sensible, balanced approach that removes regulatory barriers on the one hand and keeps protection for the competitors on the other by making the essential facilities available.

The fourth and closing point I want to make is that in these broadband policy disputes ITI has not sided with any one camp. When I hear these debates I sometimes think the warring factions could not agree on a recipe for ice water. ITI has sided with the CLECs and back in December of 1998 when we reached an accord with the ILECs we insisted that the ILECs make their networks available to the CLECs, open up the loops and the collocation. That was something that we supported at the Commission. Of course, the Commission agreed.

We also supported the ILECs before the FCC and said their packet switches or DSLAMs should not have to be unbundled, and that was the first step in the direction I think this legislation goes. But at the same time, we insisted that the CLECs have access to these essential facilities.

Last, in the area of high speed cable access, ITI has supported the FCC in foregoing from injecting itself or regulating mandatory cable access, again for the very same reason, that we think it is crucial that we have the right incentive structure, particularly when we are not talking about bottlenecks, to encourage all players to deploy.

So as you can see, Mr. Chairman, we have been actively involved in the broadband policy disputes and debates. We have consistently

supported one goal, which is let us get a policy framework in place that encourages all the players, whether they be CLECs, ILECs, cable companies, to deploy broadband so as to get the cheapest, fastest, broadband to all Americans.

We believe that your bill moves us, would move us in that direction, and I will be glad to take questions.

[The prepared statement of Mr. Pitsch follows:]

PREPARED STATEMENT OF PETER PITSCH, COMMUNICATIONS POLICY DIRECTOR, INTEL CORPORATION, ON BEHALF OF THE INFORMATION TECHNOLOGY INDUSTRY COUNCIL (ITI)

Mr. Chairman and Members of the Committee,

My name is Peter Pitsch and I am Communications Policy Director for Intel Corporation. I am here today to testify on behalf of ITI, the Information Technology Industry Council. ITI is the association of the leading information technology companies, including computer hardware and software manufacturers, networking companies, and Internet services companies. ITI member companies employ more than 1.2 million people in the United States and exceeded \$633 billion in worldwide revenues in 1999.

On behalf of ITI and its member companies, I would like to thank you for this opportunity to testify before your Committee and express our support for S. 2902, the Broadband Internet Regulatory Relief Act, introduced by Senator Brownback.

ITI believes that the rapid deployment of affordable broadband technology is a key component to continuing the dramatic growth of the Internet and e-commerce. Consumers don't want to wait 15 minutes, or even one minute, for a website to download—they want high-speed Internet services that will make their online experience more convenient. There is no doubt that the Internet economy has grown faster and larger than anyone imagined. Today, according to recent study by the University of Texas, the Internet economy is valued at over \$500 billion and is growing at an astounding 62% a year. Moreover, the impact of the Internet on our lives and our businesses has been tremendous. According to Duke University, 56% of U.S. companies will sell their products online by 2000, up from 24% in 1998. But for this growth to continue we need to have policies that support competition and encourage companies to develop the necessary high-speed infrastructure.

The core telecom policy mission of ITI is to promote the rapid deployment of affordable broadband technology, providing all consumers access to the full potential of the Internet. In pursuit of our policy goal, ITI has adopted the following broadband principles:

1. Markets, not regulators, should drive the deployment of broadband technology. To that end, ITI supports the deregulation of the telecommunications industry and the continued non-regulation of information services.
2. Market-based competition among all channels of the communications marketplace is the best way to promote rapid deployment of broadband technology.
3. Government intervention in the market is appropriate only where a competitive bottleneck exists.
4. ITI does not endorse any single broadband technology and believes deployment of multiple technologies will benefit consumers.

Consistent with these principles, ITI is proud to endorse S. 2902, the Broadband Internet Regulatory Relief Act of 1999. ITI believes that this bill, if enacted, will encourage rapid deployment of advance services to consumers through deregulation without diminishing competition for broadband services. Furthermore, ITI believes this legislation is another important step in removing barriers to competition in the telecommunications markets, which in turn will stimulate investment, spur technological innovation, reduce prices, and increase consumer choices.

ITI believes that S. 2902 would eliminate many of the incumbent local exchange carriers' (ILECs) disincentives to deploy digital electronics and transmission facilities to consumers. Specifically, by eliminating interconnection and unbundling requirements for new packet-based equipment and fiber loops deployed to residences, this legislation removes a deployment disincentive that ILECs face—being required to allow competitors unbundled access to this new high-speed equipment. ITI believes that removing this disincentive will lead ILECs to deploy more quickly high-speed services such as DSL, bringing the benefits of broadband technology to more

consumers. At the same time, ITI believes that eliminating these requirements will not undermine the ability of other competitors to provide their services so long as ILECs continue to comply with the collocation and loop provisioning rules. Unlike the existing local loop, ILECs do not have a legacy advantage in newly installed advance services and this equipment is readily available to competitors and ILECs alike.

While S.2902 removes significant regulatory barriers, ITI is satisfied that it provides important safeguards to ensure the removal of those barriers has the desired effect and does not adversely impact competition. First, to get deregulated an ILEC must meet important build-out benchmarks. Essentially, it must make advanced services available to 80% of its customers within 3 years and 100% of its customers within 5 years. Moreover, obtaining these goals will significantly increase the number of households served by DSL-capable loops which could benefit all competitors. Second, deregulation is conditioned on the ILECs complying with Commission and state collocation and loop provisioning rules, which will ensure competition can continue to thrive. ITI has long maintained that it is important that the competitive local exchange carriers (CLECs) have access to the ILECs' loops and central offices. Indeed, in December 1998, it reached an accord with the ILECs that conditioned deregulation of their advanced services on their making these essential facilities available to the CLECs. Finally, in the case of new fiber loops, ILECs can be required, upon request, to maintain the existing copper local loop, so competitors do not lose access to the home capable of providing advanced and other telecommunications services.

In sum, ITI believes that S. 2902 take a sensible step-by-step approach to eliminating regulatory barriers that will encourage rapid deployment of advance services to consumers through deregulation and competition. ITI's support of S. 2902 is one part of a consistent set of policies that we believe will increase the deployment of a variety of competing broadband technologies.

For example, ITI has recently endorsed S. 2698, the "Broadband Internet Access Act of 2000", introduced by Senator Moynihan. This technology-neutral legislation would provide tax incentives for the deployment of broadband technology to urban and rural areas that today are often not served by high-speed services, as well as for the build-out of very high-speed, next generation broadband services to residences. Like the legislation before us today, S. 2698 recognizes the need for this investment in our IT infrastructure so all Americans can realize the opportunities of broadband technology and the Internet. However, S. 2698 does not eliminate the need to make necessary regulatory reforms addressed in the current bill, S. 2902.

In the area of high-speed cable access, ITI has supported the Federal Communication Commission's decision to forego regulatory action to mandate cable access. Last year, ITI wrote to FCC Chairman Kennard in support of the Commission's amicus brief in *AT&T v. City of Portland*. ITI argued that because cable Internet access is an emerging service and the providers currently lack market power in the Internet access market, they should not be subject at this time to open network requirements. Furthermore, ITI agreed with the position taken by the FCC that the question of whether cable companies should be required to open their cable modem services should be addressed at the federal level. Apart from legal arguments over federal and local jurisdiction, ITI believes that there are compelling economic and business reasons for developing a national policy on this important issue.

ITI has also advocated regulatory relief for ILECs before the FCC. Last year, ITI argued, and the FCC agreed, that certain high-speed DSL equipment installed by incumbent local phone companies should not be required to be unbundled. ITI submitted comments to the FCC on this particular matter because we believe that it will enhance the competitive growth of the broadband market by providing an incentive for ILECs to deploy DSL quickly. At the same time, however, the FCC also agreed with the position taken by ITI that the local loop must remain open to all competitors.

As you can see, ITI has been actively involved in broadband policy issues. ITI has not sided with one camp or another, but instead it has supported and opposed the positions of all of the major players at one time or another. Throughout this policy process, ITI has supported the same basic goal; namely, rapid deployment of widespread, affordable broadband for consumers.

We would encourage the Committee to be as forward-looking as possible when it examines broadband issues. As we all know, the telecommunications debates of the latter part of the 20th century often involved pitting entrenched business interests against each other, or they focused on the competitive deficiencies of one communications medium or another. We have today a far different landscape, one that has emerged only in the last several years. With the Internet achieving status as a mass medium, consumer demand for broadband data service has grown exponentially. All

major communications infrastructure providers should be incented to meet that demand even if, in practice, that means the government will be loosening some of the regulatory restrictions that may have made sense in a prior era. As this debate continues, I would urge you to turn to ITI and the high-tech community as an impartial voice on these important issues.

On behalf of ITI, I would like to thank the Committee for its time, and I would be glad to respond to any questions.

Senator BROWNBACK. Thank you, Mr. Pitsch.
Mr. Struminger.

**STATEMENT OF ERIC STRUMINGHER, MANAGING DIRECTOR,
PAINE WEBBER INCORPORATED**

Mr. STRUMINGHER. Thank you, Mr. Chairman and Senator Breaux. My name is Eric Struminger. I am the Managing Director at Paine Webber in New York.

Senator BREAUX. Still Paine Webber?

Mr. STRUMINGHER. Not for long. I think it is going to be UBS Warburg Paine Webber or something like that. But we will just go with Paine Webber for right now.

My specialty there is in equity research, specifically in the telecommunications services area. I give investment recommendations to both large institutional investors as well as retail investors on telecommunications stocks. I hope that I am not representing any particular bias here in my oral testimony and in my written testimony. At times I will have positive recommendations on incumbent local exchange carrier stocks, at times I will have negative ones. The same for AT&T and other industry participants. So I hope that with that background you will agree that this is at least plausibly unbiased testimony.

I want to give you observations on three issues that I think may help you to evaluate the merits of the proposed legislation as they pertain to deregulation of the incumbent local exchange carriers. The first is the challenges faced by these companies in making large investments, such as those required for consumer broadband and also rural broadband initiatives. Second, how regulatory uncertainty complicates the analysis of investment returns, and here I will have some of the same assumptions as Mr. Glassman, but some different conclusions in this area. Then last, the ramifications of the proposed legislation on investment in both consumer broadband and rural broadband by non-ILEC companies.

So first of all, there are certain challenges in making large investments about which I would like to elaborate, that are faced by the large ILECs. Just by way of background, some basic premises, for an army to be successful in war the soldiers must have confidence in the general. This kind of confidence is bred by battlefield success. Well, the same is true in a publicly traded company. For a publicly traded company to be a successful competitor in the marketplace, employees must have confidence in the CEO. This comes through the performance of the stock price. That is a basic premise through which I attack this situation.

Now let us consider specifically the issue for the large incumbent local exchange carriers. One, broadband initiatives such as consumer broadband and rural broadband require large up-front investments. SBC Communications, for example, is investing \$6 bil-

lion by the end of next year in its Project Pronto initiative toward this end.

Number two, these investments typically eat into earnings initially because of the large up-front expenses. The first costs of building a new network are dilutive to earnings in the near term.

Now, last, the ILEC shareholder base is very focused on the consistency of earnings growth, I would say more so than that for a cable TV company shareholder or even a CLEC shareholder, both companies that are competing in this space for capital. The willingness of these companies to ignore, for example—or I should not say “ignore”, but put less emphasis on—depreciation expense, that expense associated with initial investments in plant, is not the same for the investors in the large ILEC stocks.

That is very important. I think, to summarize here, Wall Street makes it tougher on these companies than on other companies to make these similar kinds of investments. Maybe this is part of the reason why companies like Verizon and Bell South and U.S. West have not adopted the same aggressive rollout strategies as SBC Communications.

A case in point here on the effect that this has had on SBC stock. Last year in the middle of the year, the stock was trading as high as \$59 per share, but it has traded in the low to mid-forties for the first half of this year, and I believe that this is in no small part due to this Pronto initiative that I have just mentioned to you and the dilutive impact on earnings.

Now, in particular SBC has a CEO who I think has a lot of respect from his employee base, so he may not suffer these kind of reputational damages of the falling stock price. But other companies may not have the same type of situation there, and I would just submit to you that this is an important issue to take a look at.

Now, the second question—this really leads into the second point that I would like to make, is that big ILEC CEOs—it is one thing for them to face this challenge in the marketplace if just leading a company and going into risky investments, but to face this challenge with the additional uncertainty about earning a return on the investment is something altogether. The basic return analysis, I would submit to you, is really complicated by regulatory uncertainty.

Three areas in which the regulations may cause some problems here. One, additional costs may be imposed on the large ILECs to modify their network. They may be asked to build new and different networks for the CLECs. Two, these companies may be forced to bear risks of market adoption not only for their services, but for CLEC services as well as a result. Last, potential delays in implementing these first two things that I just mentioned will potentially hurt the large ILECs in terms of their competition with cable companies and other operators who do not face these same regulatory restrictions.

You do not have to be an expert in math to know that it is hard to solve an equation with so many moving variables, so many unknowns, and I would submit to you that it is really hard for investors to do this.

Now, last I would like to conclude by saying that there is a risk or perceived by some to be a risk that investment will dry up if the ILECs are required to offer extensive interconnection with an unbundling of new infrastructure built for advanced services. I do not think that this is really true. Broadband, especially consumer broadband, is an exciting growth area. It has attracted lots of investment in infrastructure by cable companies, by wireless companies, and I think that there will be more investment of this nature over the course of the next couple of months and in fact the next couple of years.

We will have a very competitive market just by companies who are owning and investing in different facilities than the ILECs to compete with them in the marketplace.

So with that, I will conclude my testimony and be happy to take any questions if you have them.

[The prepared statement of Mr. Struminger follows:]

PREPARED STATEMENT OF ERIC STRUMINGER, MANAGING DIRECTOR, PAINE WEBBER
INCORPORATED

Thank you for inviting me to offer some observations on S. 2902, the "Broadband Internet Regulatory Relief Act of 2000". I am a securities analyst specializing in the telecommunications industry, and I am here to offer my opinion on three issues that are related to this proposed legislation: 1) the challenges faced by incumbent local exchange carriers (ILECs) in making large investments; 2) how uncertainty surrounding the regulatory treatment of broadband infrastructure frustrates the analysis of returns on this investment; 3) the ramifications of the proposed legislation on investment in consumer broadband services. The ILECs face specific challenges in executing a consumer broadband investment strategy that are worth your consideration. The success of any publicly traded company is in no small part a function of the success of its stock price. In order to marshal the troops into battle, a general must have the confidence of his soldiers. On the battlefield, this confidence is bred by a general's success in combat. In a publicly traded company a CEO must have the confidence of his employees. This confidence is bred by the performance of the company's stock price. The problem for large ILEC CEO's is that the stock market generally does not respond well to significant increases in investment spending like that required for consumer broadband. While such investments may bear fruit over the long-term, the investment community tends to focus on the reduction to near-term earnings growth caused by the investment and sells the shares. I believe that large ILECs are particularly vulnerable to this kind of reaction to investment because their primary shareholder base has a sharp focus on consistency of earnings growth. SBC Communications is a case in point. The company's stock price, which has traded in the low to mid \$40 per share range for most of this year, has not recovered to the high of \$59 per share reached in mid-July 1999. I think that this is in no small part a function of the "Project Pronto" initiative announced in the fourth quarter of last year.

This leads to my second point about the difficulty in estimating investment returns. What is particularly agonizing, from the standpoint of a large ILEC CEO, is that his investor base has to deal not only with the up-front cost of the investment in consumer broadband services but also the uncertainty about the ability to get a return. I mean here not the uncertainty about the market-place demand for the service that many new investments entail but uncertainty driven by the specter of regulation. I find that the following unknowns complicate the return analysis: 1) additional costs may be imposed on the ILEC to modify its network architecture to accommodate competitive local exchange carriers (CLECs); 2) ILECs may be required to bear risks of market adoption for CLEC services; and, 3) that there may be delays in implementing the service based on mandated changes to the technology and network design. The last of these is especially risky given the very competitive environment that is emerging in consumer broadband services. The point is that there are so many variables in this equation that it's very hard (maybe impossible) to figure out. The approach adopted by many investors is to avoid the ILEC stock. Many prefer to invest in consumer broadband by investing in shares of companies that are attempting to deliver these services through cable or wireless infrastructure because the return analysis is less complicated. I'd also be surprised if the un-

certainty created by the regulatory risks doesn't also frustrate the ILEC business planners who must justify the investment in consumer broadband services to their respective boards of directors. The current regulatory ambiguity simply does not lend itself well to stimulating investment in consumer broadband. Maybe this is why only SBC Communications has launched an aggressive rebuild of its outside plant to deliver broadband services.

The last point that I'd like to make concerns the perception that competition in consumer broadband services will slow if regulators do not require extensive interconnection with and unbundling of new consumer broadband investments that the ILECs make. My view is that consumer broadband represents one of the great growth opportunities for the telecommunications and media industries and that there will be no shortage of competition here. Cable operators are spending tremendous sums of money to upgrade their networks to provide broadband services and have targeted consumer broadband services as among their brightest growth prospects. Just yesterday, AT&T indicated that the plant serving more than 60% of its 28 million home cable footprint has been upgraded for broadband services. The company plans to be at 80% by year-end. In addition, owners of satellite-based distribution systems, MMDS frequencies, and PCS frequencies are all investing heavily to provide consumer broadband services. There also appears to be a concern about the fate of CLECs as a result of this legislation. Business plans that are based solely or in great part on obtaining access to new ILEC investment in advanced services facilities are very high-risk business plans in my opinion, and the investment community is well aware of these risks. Companies relying heavily on this source of revenue are having a much harder time raising money today than they were a year ago.

Senator BROWNBACK. Thank you very much, Mr. Struminger. We appreciate that. We appreciate all of your testimony. It is thoughtful.

I disagree with some and I wonder how well the bill has been actually reviewed. The purpose of the bill is to expand these services and get them out to rural areas. Mr. Pitsch I think hit the point of what his group is after is what I am after. We want as much deployment out there as we possibly can have.

It is a deregulatory approach that we are taking on this. Others would take the tax subsidy approach—others would take the subsidy approach, others would take a tax cut approach. This is a deregulatory approach to it, and it is not taking place today in the rural areas.

Dr. Duerstberger—Duersterberg. Sorry, I did that to you as well, so I apologize. It was not intended, to do that.

You are representing the manufacturers and retailers. They are moving to use the Internet as a management tool. Would you say that from an economic development perspective an entire community or region that lacks access to broadband services would be at a disadvantage compared to communities and regions that have such access? Is this going to impact your manufacturing in rural areas?

Dr. DUESTERBERG. Well, let me answer by saying that in the abstract, if there were an area that totally lacked broadband connections, that would be a severe disadvantage, for two reasons. One, companies that are already located in an area would lack the ability to expand their services. For instance, the automobile industry is going to an on-time delivery system and on-time interactive auction type system for all of their suppliers. If you cannot be connected via broadband connections to the original equipment manufacturers, then you are at a severe disadvantage because you cannot share in the design phase, you cannot share the quality data

that they require on a real-time basis. So that is a severe disadvantage.

In terms of economic development, companies that would have to go into an area underserved by broadband access would simply have higher costs. They would have to run a line in at much higher cost than if it were generally available in that area.

So the short answer is yes, I think it does make a difference.

Senator BROWNBACK. It strikes me in my communities that I represent we have a lot of manufacturers in these rural communities and this is a decided disadvantage and probably going to increase in its nature of impact on the companies in the future as these services are not available in many of the rural areas.

Mr. Pitsch, in your group's efforts they want deployment of services as broadly and as rapidly as possible, because you put forward a lot of the equipment and the services associated with broadband. You have heard the testimony of a number of people here that feel as if this will not help in the deployment of these services, may actually hinder some CLECs from offering these services. Yet you have appraised the bill and do not deem that it would do that.

What in your appraisal is different from what you have heard in the CLEC testimony or those supporting keeping the current regime?

Mr. PITSCH. Mr. Chairman, our view is that competition primarily is going to drive this, that market forces and the profit incentive are going to drive companies to invest. So when we look at the effect of this legislation, we believe that it is crucial that it provide still stronger incentives to the ILECs by eliminating regulation where it is not necessary. So that is the key to understanding our position, is focusing on our belief that competition, unless there is a bottleneck, is the best way to encourage companies to deploy.

For example, as long as the competitors have access to the existing customer lines and the companies, the incumbents, central offices, then they will be able to compete. But if the ILEC now takes a risk and employs fiber and upgrades its network, maybe that is going to drive the cable company to deploy more quickly. Maybe it is going to incent the CLEC to deploy additional facilities.

We want not just ADSL, 1.5 megabits per second. We want VDSL, we want 20 megabits per second. We want people putting more and more fiber, more and more radio equipment out there, and the primary motivation is going to be a competitive threat, and therefore that is where we think policymakers should put their primary emphasis.

We in my written testimony point out that we do support Senator Moynihan's investment tax credit as well. We believe you can make other arguments. However, from a regulatory standpoint, focus on incentives, require regulation only where there is a bottleneck. We think that exists for loops and central office space.

Senator BROWNBACK. Senator Breaux.

Senator BREAU. Thank you very much, panel, for being with us.

Mr. Glassman, Jim, I was trying to look at what you were saying about SBC's Project Pronto and what Mr. Struminger was saying about it and it seemed like, at least I take it you have two different opinions. I think, Mr. Glassman, you were saying that SBC's Project Pronto is a \$7 billion investment and the view on Wall

Street is that that \$7 billion investment would bring \$9 billion in productivity improvement. But Mr. Struminger, it seemed like you were saying that SBC has never recovered in their stock and it is trading in the low to mid-forties, has never recovered to the high of \$59 a share, and you think that is in no small part a function of their Project Pronto initiative. It seems like you are saying that Project Pronto has had a negative effect on the stock. And Jim, you are saying that this is a great example of a very good thing for the company.

Can you both comment on your perspective on this?

Mr. GLASSMAN. What I was going to say was, look, in the short term, to quote the great Burton Malkiel of Princeton University, the market is a random walk. We do not know what is going to happen tomorrow or really in the next few months or over the course of a year. But it seems to me that over the long term—and I am not endorsing SBC stock—that this kind of investment is going to pay off.

That is what the folks at SBC think and I think it is actually paying off already quickly. It does not necessarily immediately show up in the stock, however. If there is a difference between the two of us, I may have a longer term perspective about the stock and about this kind of investment.

Senator BREAUX. Mr. Struminger, is broadband a good investment?

Mr. STRUMINGER. Oh, I think it is a very good investment for SBC, notwithstanding some of the regulatory issues that are out there. The question is more how difficult is it to make this kind of investment, which requires major initial spending that will have an initially dilutive impact on the earnings of a company like SBC or any company that makes that.

While it is true that this will probably make the stock go up over the long term, another great commentator on the market I think said in the long run we are dead. There is a—the CEO of any big company has a very hard time rallying the troops to do well and selling his vision of the company to Wall Street when the stock is underperforming. This is now a year later and the stock is still well below where it was at the high, and it could well extend for another half a year, a year, who knows. The point is that it has been rough sailing for the company.

I do not want to excuse SBC or try to rationalize anything. I am just telling you this is tough, and when we add additional complications like regulatory uncertainty that makes it even tougher.

Senator BREAUX. Mr. Struminger, I guess Senator Brownback would argue that his legislation is trying to clear up some of that regulatory uncertainty. In your opinion as one who follows this very closely, can the RBOCs and the regulated companies in this area under the current regulatory scheme make the billions of dollars of investment in broadband under the current system and do it effectively from a market standpoint? Or would something like Senator Brownback is suggesting make that market situation more predictable and stable for them?

Mr. STRUMINGER. I think it would clearly make it more predictable. The problem, as I mentioned in my remarks, is that it is very difficult right now to try to estimate the returns on the investment

when you do not really know what the requirements are going to be of you. You may be asked to redesign your network in a totally unanticipated way to accommodate competitors, for example. The providers of the technology to you may be asked to change the way the technology looks or the way the technology functions in order to satisfy a competitor.

All the while, the cable operators, the companies that are using MMDS and PCS frequencies, the satellite operators, who do not face similar types of regulatory hurdles, are charging ahead fast and furious.

Senator BREAU. The cable companies, for instance, which are not common carriers, is that a significant economic advantage to them as they move into broadband applications?

Mr. STRUMINGHER. In a word, yes.

Mr. GLASSMAN. Senator Breau, can I just add something? It seems to me that perhaps it is true that Senator Brownback's bill will be beneficial to the ILECs, but I do not think that it is the function of this Congress—maybe it is a function of Mr. Struminger—to pick winners here. Maybe this will be good for the ILECs, but it is not good for other competitors, and I do not think we should choose.

My point in my testimony was quite simple, that even absent Senator Brownback's bill SBC has invested \$6 billion. That is a lot of money, and I think we are going to see more investment from ILECs and CLECs under the current regime.

Senator BREAU. Mr. Struminger says that investment has contributed to their stock being very low.

Mr. GLASSMAN. Look, you know, I long ago gave up trying to figure out the short-term movements of the stock market. I do not think anyone can explain why a stock moves in the short term the way it does. I do not think, if I can put in a plug for my book or my basic philosophy of investing, I do not think anybody should try, really. I think you should buy good companies that have good leadership and stick with them for the long term.

Senator BREAU. Mr. Struminger.

Mr. STRUMINGHER. If I could just have one more opportunity to clarify what I am saying here. The argument here is not whether investing for the long term is good or not. It is just a recognition that short-term variations in the stock price can have a meaningful impact on a company's willingness to make certain investments. While SBC has in fact invested or committed to making this investment, it conceivably could have been a lot more, a lot faster.

We have not seen Bell South, we have not seen U.S. West, we have not seen Bell Atlantic, et cetera, step up to the plate in the same way. While there may be a myriad of reasons for this, I would not be surprised if one was the issues that are being raised here, today.

Senator BREAU. Ms. Ashdown, let me ask you a question. Bell South has stated that they are paying about \$500 million or so to smaller telephone companies. This is more than they receive from their usage fees versus the flat fees. Mr. Ellis before I got here, talked in terms of it costing them \$450 for installing his daughter's Internet line and getting \$15 back from his daughter for the usage on the flat fee basis.

Is there not an inequity here that needs to be addressed? I mean, those numbers are just astronomical.

Ms. ASHDOWN. Are you suggesting that Internet prices need to be higher? I just want to make sure I understand the question.

Senator BREAUX. No, I am just suggesting that—the argument I think that some would make is that what they are able to receive as opposed to what they pay is vastly out of any kind of realistic proportions. The FCC, I know I have asked them along with Senator Lott to try and look at some ways to address the reciprocal compensation issue.

Is there not a need to do that? I mean, it seems like they make a very good case about the inequities that they have right now.

Ms. ASHDOWN. Well, I notice, though, that they are not asking to eliminate reciprocal compensation across the board. They are just asking to eliminate it where it is bothering them the most right now. They still want, I think—if they were asking for zero across the board, that would probably hurt them in terms of the competitive companies that are going to be dealing with a smaller base of subscribers, where all of their calls are going to be terminating on the network with the most market share. There they stand to do very well on reciprocal compensation.

So where it is not hurting them they do not want to get rid of it, and where they have to pay they do want to get rid of it. As far as how that affects the consumer, I think that it definitely is a concern for the Internet service provider if it means that we are burdened with the cost of terminating those calls and we have to pass that along to our subscribers because, as you know, the average price for Internet service in this country is around \$19, \$20 a month. There is a reason for that, and if I have to add \$6 a month to my prices on average that comes straight out of my bottom line.

I cannot compete with—and I think Bell South is a very interesting example now that you mention it, because Bell South, for instance, is offering \$39.95 DSL access. With that DSL access they are throwing in a free modem, they are throwing in the phone line, they are throwing in the Internet access. Then on the wholesale model that they are presenting to the Internet service providers in Bell South territory, they are selling the wholesale DSL loop to the Internet service providers for \$39 per month and telling the Internet service providers: Go ahead and sell all the Internet access you want at 95 cents a month.

I think that is a definite reason that Internet high speed DSL access is being deployed more slowly than it could be.

Senator BREAUX. So your recommendation is that we do not do anything in this area, either the Brownback bill or—

Ms. ASHDOWN. Well, from what I have been able to observe and in my dealings with CLECs and buying phone services from them, what they have told me is that the reciprocal compensation issue is contractually agreed to between them and the phone companies, and of course the incumbent phone companies, thinking that all the traffic was going to be ending over there, insisted on a very high rate in the beginning, and that rate has come down quite a lot since they realized what was going to happen with the Internet traffic.

I do not think that there are very many CLECs that are counting on that continuing to go away. But I do not see why it should go away for them and not go away for the incumbents.

Senator BREAUX. Thank you.

Thank you, Mr. Chairman.

Senator BROWNBACK. I want to make clear, because there have been some assertions of what the bill is aimed at. The effort of the bill is not to advantage one company or another. The effort of the bill is to get these services out to rural areas. I have a problem. These services are not in rural areas. You have great robust competition in New York City, Mr. Glassman. I am glad you do. God bless you for it. I wish we had it in rural parts of Kansas, and we do not have it.

The numbers again: 73 percent have these sort of services in cities with populations over half million, less than 5 percent in cities 5 to 10,000. So that is the target. That is what we are trying to aim at, is how do we get these services there.

I think most of you heard the last panel, where the CLECs, I asked them: When are you going to be there? When can we expect you? Not certain, we do not know, maybe some changes in technology, maybe some possibilities here.

The bill has a buildout requirement. To be able to get the regulatory relief, you have got to build out 100 percent within 5 years to be able to get that. So that is my focus with this, and it is a deregulatory effort.

I would hope that if you do not agree with this, that you would come back and say, well, OK, but we could do it this way, we could get the buildout that you want by going this route. And Senator Moynihan's approach is one way to do that, which is to say let us provide a tax credit or a subsidy in some way through the tax code of doing that. I happen to think that going the regulatory relief is the way to go.

But if you have a better way, I am all ears to be able to hear that, because we are being left behind New York City in this, and we take some umbrage about that occurring. We have not in the past left rural areas behind. So this is the effort, and if you have a different way to go to get this done—I do not know if you have, Mr. Glassman or Ms. Ashdown, now a way that we can go at that. I would appreciate the suggestion.

Ms. ASHDOWN. I actually do have a suggestion, Mr. Chairman.

Senator BROWNBACK. Good.

Ms. ASHDOWN. That is that enforcement of the existing regulations would be a big step in getting Internet access out to the rural areas. My big concern with the bill is that removing the obligation for incumbent carriers that, as you know, have been selling a lot of rural switches off, but in the areas where they still are in the rural areas and they own the switches, if this bill passes they are under no obligation to provide nondiscriminatory provision of the lines that Internet service providers need to be able to get to the phone company for access.

Senator BROWNBACK. Ms. Ashdown, if that is the case why has that not been a problem in urban areas, where you have 73 percent penetration, and it has been a problem in rural areas?

Ms. ASHDOWN. It actually is a problem in the urban areas.

Senator BROWNBACk. Well then, why have you busted through there and not in rural areas?

Ms. ASHDOWN. I would submit to you that the Internet service providers are not busting through very well in the urban areas at all.

Senator BROWNBACk. 73 percent. I will be happy with that in rural areas if you will give me that.

Ms. ASHDOWN. Right, I understand that. But I am not very happy with 73 percent when the lion's share of that market has gone to the incumbent by their violation of Federal regulations. Letting them continue to violate Federal regulations in order to get them to have the same kind of monopoly market share in the rural areas is not, I think, what you want to see. What you want to see is more competition in the rural areas.

Senator BROWNBACk. I want some service.

Ms. ASHDOWN. Yes, but are you saying that you want service and you are happy to have a monopoly and you do not care whether it is competitive service or not? Because that is what this bill is going to do.

Senator BROWNBACk. We want some service and we do not presently have it.

Mr. Pitsch.

Mr. PITSCH. Thank you, Mr. Chairman. I want to emphasize that ITI wants competition. We want multiple providers. We think that is key. If we thought this bill would undermine the possibility of multiple providers, we would not be supporting it. We think that the bill prudently makes essential facilities available.

But the goal should not be, to use Mr. Glassman's phrase, to favor one sector of the industry over another. I think the logic of the Telecommunications Act, 251[d][2], is this necessary to competition, I think speaks on behalf of the approach this legislation is taking.

I think, to answer your question before perhaps more bluntly, different sectors of the various factions here arguing have very concentrated economic interests. They happen to be narrow. CLECs do not care how the ILECs do, ILECs do not care how the CLECs do. In fact, probably it is inverse, and the same for cable. I want to emphasize, we have been looking at this, we have a very intense interest, and, to put it perhaps uncharitably, we are arms merchants. We want all of them out there, we want them succeeding, and we want them going at loggerheads.

We believe the best way to do that is to rely on competition and deregulation, but, very importantly, also make those essential facilities available. As long as that is the case, I think we will have robust competition.

Senator BROWNBACk. Mr. Glassman.

Mr. GLASSMAN. Mr. Chairman, I think sensible people want exactly the same thing, Mr. Pitsch, and I just think there are different ways to go about it. Now, I have a great deal of respect for you, Mr. Chairman, in sticking up for your rural constituents. But of course, as you know, there are Senators who have large rural constituencies, like Senator Stevens of Alaska, Senator Dorgan, who was just here, from North Dakota, who differ with you and who agree with me that the best way to get service to your con-

stituents is through the competitive process that was set in motion by the 1996 Telecommunications Act.

But I think we should not be naive about this. The truth is that rural areas are not going to be served as quickly as urban areas and suburban areas. As you said, I live in New York City. My block on Amsterdam Avenue, there is a Korean restaurant and there is an Italian restaurant and there is a Spanish restaurant, on and on and on. I am sure that is not true in most rural areas. However—

Senator BROWNBACK. That is not necessary for competition. For us, what we want is to be able to have access to be competitive. That is why we did rural telephony, that is why we did rural electrification.

Mr. GLASSMAN. But you are getting that and you are going to get that through the competitive process. Do not forget that the world's largest retailer is a company that started in Bentonville, Arkansas, serving rural communities. There are lots of businesses out there and we heard from the first panel about numerous CLECs that want to serve these underserved areas.

I really think that we have a process that is working and to interfere with it at this point would be, I believe, a mistake. It has been a mistake throughout the history of this country, quite frankly, for government to intervene in markets when there is no one who has more incentive to provide services to someone who is going to pay for it than a business. We just should not be getting in the way of those businesses, even if we are extremely well intentioned in wanting to help them.

Senator BROWNBACK. Walmart would not be there without rural electrification years ago, nor without rural telephony.

Mr. GLASSMAN. I would agree.

Senator BROWNBACK. You can question whether that should continue today.

Mr. GLASSMAN. Right.

Senator BROWNBACK. I think there is a legitimate question about that. But my point is we have never tried to create a Swiss cheese across the country on competitive abilities and that is why you can get a Walmart in Arkansas, in rural Arkansas. I do not want the same here, but I would appreciate any thoughts that you would have, anybody, on this. If you see ways that we should tighten the bill down, that we can still deal with the rural competition and yet address the concerns that you have, Ms. Ashdown, anybody else, I am very open to doing that.

My objective is quite specific on this and if you see that we are having negative impacts in other areas because of the way it is drafted, let me hear of how we could tighten that focus so that we still hit the target that we are aiming at without addressing your concerns. I know there are a number of different economic issues and interests that are here.

I do appreciate the panels traveling here, your time, your interest, your intensity. The record will stay open for the requisite number of days.

The hearing is adjourned.

[Whereupon, at 12:07 p.m., the Committee was adjourned.]

